May .....

DEPARTMANT OF THE INTERIOR J. LEASE DESIGNATION AND SERIAL NO. GEOLOGICAL SURVEY U-52169 expires 3/31/93
6. IF INDIAN. ALLOTTEE OR TRIBE NAME APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK N/A 7. CHIT AGREEMENT NAME PLUG BACK DEEPEN DRILL 🖾 Forest Creek Divide b. TYPE OF WELL MULTIPLE ZONE S. FARM OR LEASE NAME GAS WELL OIL X OTHER 2. NAME OF OPERATOR 9. WELL NO. Forest Creek ARCO Oil and Gas Co., A Division of Atlantic Richfield Company Divide Unit #1 3. ADDRESS OF OPERATOR 10. FIELD AND POOL, OR WILDCAT P.O. Box 5540, Denver, CO 80217 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\*) Wildcat 11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA \*130 FNE 2435 FWL (NE/4 NW/4) Sec. 28-T31S-R2W S.L.M. NE/4 NW/4 At proposed prod. some Sec. 28-T31S-R2W S.L.M. approx. the same 12. COUNTY OR PARISH : 13. STATE 14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE-Approx 3.5 miles SW of Antimony, Utah Garfield Utah 17. NO. OF ACRES ASSIGNED TO THIS WELL 13. DISTANCE FROM PROPOSED\*
LOCATION TO MEASEST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drig, unit line, if any 24351 16. NO. OF ACRES IN LEASE Not assigned 5304.07 20. ROTARY OR CARLE TOOLS 19. PROPOSED DEPTE 13. DISTANCE FROM PROPOSED LOCATION®
TO NEAREST WELL, DEILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT. 38001 Rotary 22. APPROX. DATE WORK WILL START 21. ELEVATIONS (Show whether DF, RT, GR, etc.) October 20, 1984 Ground elevation: PROPOSED CASING AND CEMENTING PROGRAM 23. QUANTITY OF CRMENT SETTING DEPTH SIZE OF CASING WEIGHT PER FOOT SIZE OF HOLE 14-3/4" 10-3/4" 40 5# K-55 STC 10501 Int to curf approx 815 sxs 5-1/2" 38001 Cmt to 2000' approx 425 exe 15.5# K-55.STC 9-1/2" A 7-5/8" contingency string will be considered if hole conditions dictate. At that time a Sundry Notice will be filed. \*Note: Location was moved due to potential archeological site. Moving the location was approved at the onsite inspection held on 9/20/84. Propose to drill to 3800' to test the Navajo formation @ 3355'. This permit is being filed in accordance with Onshore Oil & Gas Order Number 1. Attachments: Drilling Program with Exhibits Surface Use Plan with Exhibits. ARCO Oil & Gas Company is the current lessee of record on the subject lease. This well is the first well to be drilled within the Forest Creek Divide Unit. For any questions concerning this subject please call Mr. Harry Engel of our Drilling Department at (303) 293-7305. IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any. HRE Operations Manager RUI (This space for Federal or State office (190) PERMIT NO. APPROVED BY THE STATE APPROVED BY CONDITIONS OF APPEDE WITCH DIVISION OF OIL, GAS, AND MINING

See Instructions On Reverse Side

DATE:

BY:

RECEIVED

OCT 0 1 1984

DIVISION OF OIL GAS & MINING

Record GLO plat 17 • Found corner FORM F-106 () Field measure

murked

20 21 7315

29 | 28 R2W

w/rock pile

EXHIBIT "B"

Found GLO 1913 B.C. marked 1/4 21 T315 28 R2W R. 2 W. Found GLO 1913 BC. (Basis of bearing: 2630.291) N 89° 53' W 2435 130 FNL FNL CWell Loc. (FOREST CLECK DIVIDE UNIT #1) Gr Elev @ Loc. = 17085 79.66 Cliz N 89° 56' W Scale ... I" = 1000'

> Powers Elevation of Denver, Colorado has in accordance with a request from HARRY ENGLE for ARCO OIL & GAS determined the location of Forest Creek Divide Unit #1 to be 130' FNL & 2435' FWL of Section 28 Township 31 south Range 2 WEST of the SALT LAKE GARFIELD County, UTAH

> > I hereby certify that this plat is an accurate representation of a correct survey showing the location of

Date: Sept. 21, 1984

Licensed Engineer () State of Colorado

"Utah exception

T. 315.

## BUREAU OF LAND MANAGEMENT CEDAR CITY DISTRICT CONDITIONS OF APPROVAL FOR PERMIT TO DRILL

Company: ARCO Oil & Gas Company Well No.: Forest Creek Divide

Unit #1

Location: NE/4 NW/4 Sec. 28-T31S-R2W S.L.M. Lease No.: U-52169

Onsite Inspection Date: September 20, 1984

All lease and/or unit operations will be conducted in such a matter that full compliance is made with applicable laws, regulations (43 CFR 3100), Onshore Oil and Gas Order No. 1, and the approved plan of operations. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished the field representative to ensure compliance.

#### A. DRILLING PROGRAM

#### 1. Surface Formation and Estimated Formation Tops:

Oligocene Volcanics - Surface
Eocene Claron - 1050'
Thrust Fault - 1700'
Carmel - 3080'
Navajo - 3355'

 Estimated depth at which oil, gas, water or other mineral-bearing zones are expected to be encountered:

Formation & Depth

Expected oil zones: \

Possible Navajo @ 3355'

Expected gas zones:,

Possible Navajo @ 3355'

Expected water zones:
Expected mineral zones:

None anticipated

All fresh water and prospectively valuable minerals (as described by BLM at onsite) encountered during drilling will be recorded by depth, cased and cemented. All oil and gas shows will be tested to determine commercial potential.

#### 3. Minimum Specifications for Pressure Control:

Exhibit "A" is a schematic diagram of the blowout preventer equipment. The annular preventer will be tested to 1500 psi and the pipe and blind rams will be tested to 3000 psi upon nipple up. Pipe rams will be operationally checked each 24-hour period, as will blind rams and annular preventer each time pipe is pulled out of the hole. All checks of BOP will be noted on Daily Drilling Reports. Accessories to BOP equipment will include an upper and lower kelly cock, a floor safety valve, a drill string BOP, and a choke manifold with equipment pressure rating equal to the BOP stack.

> Choke manifold and safety valves will be pressure tested to 3000 psi upon nipple-up. Exhibit "A" also shows the proposed Accumulator Unit and Choke Manifold. Hydraulic controls for BOPE will be located at the Accumulator Unit with hand wheel back-up.

> BOP systems will be consistent with API RP 53. Pressure tests will be conducted before drilling out from under all casing strings which are set and cemented in place. Blowout preventer controls will be installed prior to drilling the surface casing plug and will remain in use until the well is completed or abandoned. Preventers will be inspected and operated at least daily to ensure good mechanical working order, and this inspection recorded on the daily drilling report. Preventers will be pressure tested before drilling casing cement plugs. The Resource Area will be notified 48 hours in advance when pressure tests are to be conducted.

#### 4. Proposed Casing Program:

Casing	Hole Size	Ir	Hol nter	.e val	Length	OD	Weight, Grade Connection	New/ Used
Conductor	22"	0	-	100	100'	16"	65#,welded jt.	New
(Set by Dry Surface	Hole Digge 14-3/4"	r) 0	_	1050	1050'	10-3/4"	40.5#,K-55,STC	New
Production	9-1/2"	0		3800'	38001	5-1/2"	15.5#,K-55, STC	. New

#### Cement Program:

Cmt to surf w/approx 130 sx Cl "H" neat cmt. Conductor:

Cmt to surf w/approx 500 sx Lite cmt w/1/4#/sx Surface Casing: cellophane, 2% CaCl<sub>2</sub> mixed @ 12.7 ppg, yield 1.84  $ft^3/sx$  foll'd by 315 sx Cl "H" cmt w/1/4#/sx

cellophane mixed @ 16.4 ppg, yield 1.06 ft<sup>3</sup>/sx. Cmt

will be circulated to surface.

Mix & pmp approx 200 sx "Lite" cmt w/10#/sx Production Casing: Gilsonite, 1/2\*/sx cellophane mixed @ 12.7 ppg, yield 1.84 ft<sup>3</sup>/sx foll'd by 225 sx Cl "H" neat cmt  $\sqrt{1/4}$ /s cellophane, mixed @ 16.4 ppg, yield 1.06

ft<sup>3</sup>/sx. Est top of cmt @ 2000'.

Note: Hole conditions will dictate type and percentage of additives to be used.

All potentially productive hydrocarbon zones will be cemented to prevent communication. Actual production casing cement volumes will be based upon caliper log plus 15%-20% excess.

Anticipated cement tops will be reported as to depth, not the expected number of sacks. The Resource Area will be notified 48 hrs in advance when running casing strings and cement.

#### 5. Type and Characteristic of Proposed Drilling Fluids:

Mud system will be low-lime gel-chemical for the surface hole with adequate stocks of sorptive agents on site to handle possible spills of fuel and oil on the surface. Adequate mud materials will be stockpiled on location to completely rebuild entire mud system volume (surface volume + hole volume). Surface volume estimated at ±500 bbls. An aerated mud system or stiff foam will be used below the surface casing.

Depth	Type	Weight #/gal.	Visc. sec/qt.	Fluid <u>Loss</u>
0'-1050'	Fresh water gel,lime,spud mud	8.3-8.6	30-40	No control
1050'-TD	Aerated mud or stiff foam		tions will s & rheolo s.	

No chromates or other toxic chemicals will be used in the mud system. A shale shaker, desander, and desilter will be utilized to aid in solids control when drilling with mud.

Blooie line will be misted to reduce fugitive dust when air drlling.

#### 6. Coring, Logging, and Testing Program:

- a. Coring: Two 60' cores in the Navajo.
- b. DSTs: Two open hole DSTs are planned in the Navajo.
- c. Logging as follows:

Open Hole		Cased Hole
DIL/SP/BHCS/GR-Cal FDC/CNL/GR/Cal	TD-Base of surf csg	CBL/CCL/GR/VDL-TD to TOC
VSP	TD-surface	

Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (Form 3160-4) will be submitted to the District Office not later than thirty (30) days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3164. Two copies of all logs, core descriptions, core analyses, well test data, geologic summaries, sample description, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, will be filed with Form 3160-4. Samples (cuttings, fluids, and/or gases) will be submitted when requested by the Cedar City District Manager.

#### 7. Abnormal Conditions, Bottom Hole Pressures and Potential Hazards:

No abnormal pressures or temperatures have been noted or reported in wells drilled in the area nor at the depths anticipated in this well. HoS is not anticipated at any depths in this well.

#### 8. Anticipated Starting Dates and Notifications of Operations:

The operator will contact the Escalante Resource Area at (801)826-4291, forty-eight (48) hours prior to beginning any dirt work on this location.

No location will be constructed or moved, no well will be plugged, and no drilling or workover equipment will be removed from a well to be placed in a suspended status without prior approval of the District Manager. If operations are to be suspended, prior approval of the District Manager will be obtained and notification given before resumption of operations.

The spud date will be reported orally to the Area Manager (Cedar City District at 801-586-2401) within a minimum of twenty-four (24) hours prior to spudding. Written notification in the form of a Sundry Notice (Form 3160-5) will be submitted to the District Office within twenty-four (24) hours after spudding. If the spudding occurs on a weekend or holiday, the written report will be submitted on the following regular work day.

In accordance with Onshore Oil and Gas Order No. 1, this well will be reported on Form 9-329, "Monthly Report of Operations", starting with the month in which operations commence and continue each month until the well is physically plugged and abandoned. This report will be filed directly with the BLM Cedar City District Office, P.O. Box 724, Cedar City, Utah 84741.

<u>Immediate Report:</u> Spills, blowouts, fires, leaks, accidents, or any other unusual occurrences shall be promptly reported to the Resource Area in accordance with requirements of NTL-3A.

If a replacement rig is contemplated for completion operations, a "Sundry Notice" (Form 3160-5) to the effect will be filed for prior approval of the District Manager, all conditions of this approval plan are applicable during all operations conducted with the replacement rig. In emergency situations, verbal approval to bring on a replacement rig will be approved by the District Petroleum Engineer.

Should the well be successfully completed for production, the District Manager will be notified when the well is placed in a producing status. Such notification will be sent by telegram or other written communication, not later than five (5) business days following the date on which the well is placed on production.

A first production conference will be scheduled within fifteen (15) days after receipt of the first production report. The Resource Area Office will coordinate the field conference.

No well abandonment operations will be commenced without the prior approval of the District Manager. In the case of newly drilled dry holes or failures, and in emergency situations, oral approval will be obtained from the District Petroleum Engineer. A "Subsequent Report of Abandonment" (Form 3160-5) will be filed with the District Manager within thirty (30) days following completion of the well for abandonment. This report will indicate where plugs were placed and the current status of surface restoration. Final abandonment will not be approved until the surface reclamation work required by the approved APD or approved abandonment notice has been completed to the satisfaction of the Area Manager or his representative, or the appropriate surface managing agency.

Approval to vent/flare gas during initial well evaluation will be obtained from the District Office. This preliminary approval will not exceed 30 days or 50 MMCF gas. Approval to vent/flare beyond this initial test period will require District Office approval pursuant to guidelines in NTL-4A.

Upon completion of approved plugging, a regulation marker will be erected in accordance with 43 CFR 3162.6. The marker will be constructed as follows: According to regulations.

The top of the marker will be closed or capped.

The following minimum information will be permanently placed on the marker with a plate, cap or beaded—on with a welding torch:

"Fed" or "Ind", as applicable. "Well number, location by  $1/4\ 1/4$  section, township and range". "Lease number". "Operator".

Other: The anticipated spud date is October 20, 1984. Dirt work on the access road is estimated to take approximately 4 days to complete. Therefore dirt work is estimated to start October 16, 1984, or as soon as approval is received. ARCO Oil & Gas Company has in effect a \$150,000 Nation Wide Drilling Bond (#7943391) to cover drilling operations on all Federal lands. ARCO Oil & Gas Company is the current lessee of record on the subject lease.

#### B. SURFACE USE PLAN

#### 1. Existing Roads:

- a. The location is approximately 3.5 miles southwest of Antimony, Utah. The proposed wellsite and elevation plat are shown as Exhibit "B". Staking included two directional reference stakes.
- b. Exhibit "C" describes the route to location. At the junction of Utah 22 & Jones Corral Road in Antimony, Utah, go south on Jones Corral Road for 2.8 miles, turn left and go 0.7 miles to location.
- c. Exhibit "C" shows the location of a temporary crossing that will be installed over the East Fork Canal. The crossing will be a 6' diameter culvert, using fill material located onsite. The location of the culvert was approved at the onsite inspection. The land where the culvert will be installed and the location of the fill material is owned by the Otter Creek Reservoir Company. Contact Mr. Virge Brown at (801)876-5869. The 6' culvert will be removed after operations are completed and if the well is a producer, a permanent crossing will be designed to handle the water flow and traffic.

#### 2. Planned Access Roads to be Constructed:

1. Width will be 18' (top surface). Total length is 0.7 miles.

2. Maximum grade will be 8%.

3. Cuts & fills will be kept to a minimum to reduce surface damage.

4. Turnouts are not required.

5. The access road will be designed to ensure proper drainage.

6. No culverts will be required.

7. There will be no fence cuts or cattleguards installed.

- 8. No surfacing material is required. No surface material will be removed from BLM Land.
- 9. There are no existing facilities on the proposed location.
- 10. Road construction will be in conformance with Class III road standards.

Surface disturbance and vehicular travel will be limited to the approved location and access road. Any additional area needed will be approved by the District Manager in advance.

All trees will be cut and stockpiled on location.

#### 3. Location of Existing Wells Within a One-Mile Radius:

- 1. Water wells none.
- 2. Injection wells None
- 3. Disposal wells None
- 4. Producing wells None
- 5. Drilling wells None
- 6. Temporarily abandoned wells None
- 7. Abandoned wells None
- 8. Shut-in wells None
- 9. Monitoring or observation wells None

#### 4. Location of Tank Batteries and Production Facilities:

All permanent (onsite for six (6) months or longer) structures constructed or installed (including oil well pump jacks) will be painted a flat, nonreflective, earth tone color to match the standard environmental colors, as determined by the District Manager. All facilities will be painted within six (6) months of installation. Facilities required to comply with the Occupational Safety and Health Act (OSHA) may be excluded.

If a tank battery is constructed on this lease, it will be surrounded by a dike of sufficient capacity to contain 1-1/2 times the storage capacity of the battery.

All loading lines and valves will be placed inside the berm surrounding the tank battery.

All site security guidelines identified in 43CFR 3162.7 regulations will be adhered to.

All off-lease storage, off-lease measurement, or commingling on-lease or off-lease will have prior written approval from the District Manager.

All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed.

Gas meter runs for each well will be located within five hundred (500) feet of the wellhead. The gas flowline will be buried from the wellhead to the meter along with any other sections occurring on the pad. Meter runs will be housed and/or fenced.

The oil and gas measurement facilities will be installed on the well location or at a site that will accompodate design requirements. The oil and gas meters will be calibrated in place prior to any deliveries. Tests for meter accuracy will be conducted monthly for the first three (3) months on new meter installations and at least quarterly thereafter. The Area Manager will be provided with a date and time for the initial meter calibration and all future meter-proving schedules. A copy of the meter calibration reports will be submitted to the Resource Area Office. All meter measurement facilities will conform with the API standards for liquid hydrocarbons and the AGA standard for natural gas measurement.

ARCO Oil & Gas Company does not own or operate any facilities within a one-mile radius of the proposed location. This well is a wildcat. If the well is a producer, a Sundry Notice will be filed describing all proposed production facilities.

#### 5. Location and Type of Water Supply:

A. All water needed for drilling purposes will be obtained from:

Otter Creek Reservoir Company Contact: Mr. Virge Brown at (801)896-5869 Water location is at the East Fork Canal as shown on Exhibit "C"

A temporary water use permit for this operation will be obtained from the Utah State Engineer & Otter Creek Reservoir Company. Water obtained on private land, or land administered by another agency, will require approval from the owner or agency for use of the land. An approved temporary water use permit will be filed under a separate letter.

- B. Water trucks will be used to haul water to location.
- C. No water well will be drilled.
- D. No water will be taken off Federal lands.

#### 6. Source of Construction Material:

Pad construction material will be obtained from cut material located onsite. No material will be taken from lands other than the proposed location.

#### 7. Methods of Handling Waste Disposal:

The reserve pit will not be lined.

Three sides of the reserve pit will be fenced before drilling starts. The fourth side will be fenced as soon as the drilling is completed. The fence will be kept in good repair while the pit is drying. The fence will be four strands of barb wire.

All trash must be contained in a portable wire cage and disposed of at a sanitary landfill. No burning will take place. Operator will be responsible for trash and roadside litter generated by their operation along their access route.

Produced waste water will be confined to a lined pit for a period not to exceed ninety (90) days after initial production. During the ninety (90) day period, an application for approval of a permanent disposal method and location, along with the required water analysis, will be submitted for the District Manager's approval pursuant to Onshore Oil and Gas Order No. 3 (NTL-2B).

Drill cuttings will be buried in the reserve pit. Drilling fluids will be handled and disposed of in the reserve pit. Any fluids produced during drilling test or while making production test will be collected in a test tank. Any spills of oil gas, salt water or other noxious fluids will be cleaned up and removed.

Chemical toilet facilities will be provided for human waste. Garbage and non-flammable waste will be handled in a closed wire cage. Drill fluids, water, drilling mud and tailings will be kept in reserve pit.

After the rig moves out, all materials will be cleaned up and no adverse materials will be left on location. All dangerous open pits will be fenced during drilling and kept closed until such time as the pit is leveled.

#### 8. Ancillary Facilities:

Living facilities will be required. They will be located onsite. Three (3) or four (4) trailers will be on location, they will be equipped with concrete septic tanks (closed system). The septic tanks will be pumped as required. No waste will be disposed of on location. The closed concrete septic tank will conform to local health regulations.

#### 9. Well Site Layout:

The reserve pit will be located on the west side of location. Exhibit "D" is drillsite location as staked. Exhibit "E" shows planned cuts and fills.

The top 6" of soil material will be removed from the location and stockpiled separately off the location on the northeast. Topsoil along the access road will be reserved in place adjacent to the road. If inadequate topsoil is stockpiled, the operator will bring in suitable material from outside sources at his expense.

A trash pit will not be allowed on location.

Exhibit "F" is a diagram of the rig and equipment.

#### 10. Plans for Restoration of Surface

Immediately upon completion of drilling, the location and surrounding area will be cleared of all remaining debris, materials, trash and junk not required for production. Before any dirt work to restore the location takes place, the reserve pit must be completely dry.

The operator or his contractor will notify the District Office (48) hours before starting reclamation work that involves earthmoving equipment and upon completion of restoration measures.

Before any earthwork to restore the location takes place, the reserve pit will be dry and all trash (barrels, metal, etc.) it contains must be removed from public lands. Any dispersal of clarified drilling mud/drilled fluids over the drill location is subject to the approval of the District Office.

All disturbed topsoil will be evenly distributed over the disturbed area.

The stockpiled topsoil will be evenly distributed over the disturbed areas.

All disturbed areas will be scarified with the contour to a depth of 8-12 inches. Do not smooth pads out, leave a roughened surface.

Seed will be broadcast or drilled during a period specified by the District Office. Seeding will be repeated until vegetation is successfully established. Seeding will be done in presence of the authorized officer. Seed mixture will be prescribed by the District Office.

The reserve pit and that portion of the location and access road not needed for production or production facilities will be reclaimed. The time required to complete the reclamation will depend upon the area to be reclaimed. ARCO Oil and Gas Company agrees to begin reclamation as soon as weather conditions are suitable and further agrees to complete the project in a timely manner.

#### 11. Surface and Mineral Ownership:

The location surface is administered by the BLM. The mineral rights are Federal, administered by the BLM.

#### 12. Other Information:

For any questions regarding this permit, please contact Mr. Harold Engel of our Drilling Department at (303)293-7305.

There will be no deviation from the proposed drilling and/or workover program without prior approval from the District Manager. Safe drilling and operating practices must be observed. All wells, whether drilling, producing, suspended, or abandoned, will be identified in accordance with 43 CFR 3162.2.

"Sundry Notice and Report on Wells" (Form 3160-5) will be filed for approval for all changes of plans and other operations in accordance with 43 CFR 3164.

The dirt contractor will be provided with an approved copy of the surface use plan.

The location was moved approximately 100' SW during the onsite inspection to avoid a potential archeological site discovered by Brian O'Neil (Archeologist) of Powers Elevations. The location as it exists now will not disturb any archeological artifacts. A copy of the archeological report will be filed under separate cover. However, if any cultural resources are found during construction, all work will stop and the District Manager will be notified.

This permit will be valid for a period of one (1) year from the date of approval. After permit termination, a new application will be filed for approval for any future operations.

Exhibit "G" is a copy of the proposed Forest Creek Divide Unit Area. This well is the first proposed well within the unit area.

#### 13. Lessee's or Operator's Representative and Certification:

Larry Morse ARCO Oil and Gas Company P. O. Box 5540 Denver, Colorado 80217 Bus. Tele: (303) 293-7031 J. M. McCarthy
ARCO Oil and Gas Company
P. O. Box 5540
Denver, Colorado 80217
Bus. Tele: (303) 293-7127
Res. Tele: (303) 293-1339

#### Certification:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by ARCO Oil and Gas Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

Date Date

Zarry Morse Operations Manager

ARCO Oil and Gas Company

The onsite inspection was held 8/29/84

PARTICIPANTS:

TITLES:

Harold R. Engel

Drilling Engineer, ARCO Oil & Gas

Company

Leonard Henney

Ross Construction Company

Quay Simons

BLM

Escalante Resource Area Manager's address and contacts are:

Address: P.O. Box 225, Escalante, Utah 84726

Your contact is: Mr. Quay Simons

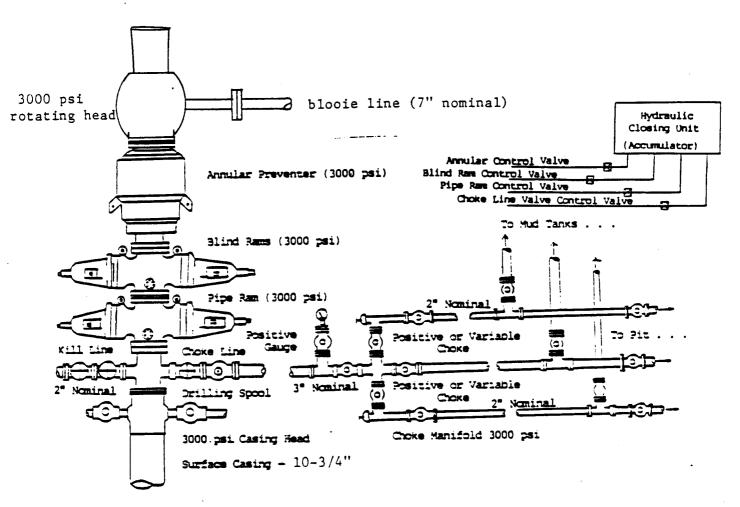
Office phone: (801)826-4291

Cedar City District Office contact is Mr. Paul Carter

Address: P.O. Box 724

Cedar City, Utah 84720

Office phone: (801)586-2401



1. All BOP equipment shall be fluid and/or mechanically operated.

2. 30P's and all fittings will be in good working condition and rated at 3000 psi W.P. minimum.

3. Equipment through which bit must pass shall be at least as large as casing size being drilled.

4. Nipple above BOP shall be at least same size as casing being set.

5. Upper Kelly Cock and lower Kelly Cock shall be 3000 psi W.P. minimum.
6. Floor safety valve (full opening) and drill string BOP with appropriate rated pressure shall be available on rig floor with connections or sups to fit any tool joint in string.

7. Minimum size for choke line shall be 3 inches nominal diameter, minimum size for vent lines downsteam of chokes shall be 2 inches nominal, and vent line which by-passes shall be a minimum of 3 inches nominal and shall be as straight as possible.

8. Pluid lines from accumulator to BOP's and all remote control fluid lines shall be steel and rated at or above maximum accumulator pressure. Lines shall be bundled and protected from damage.

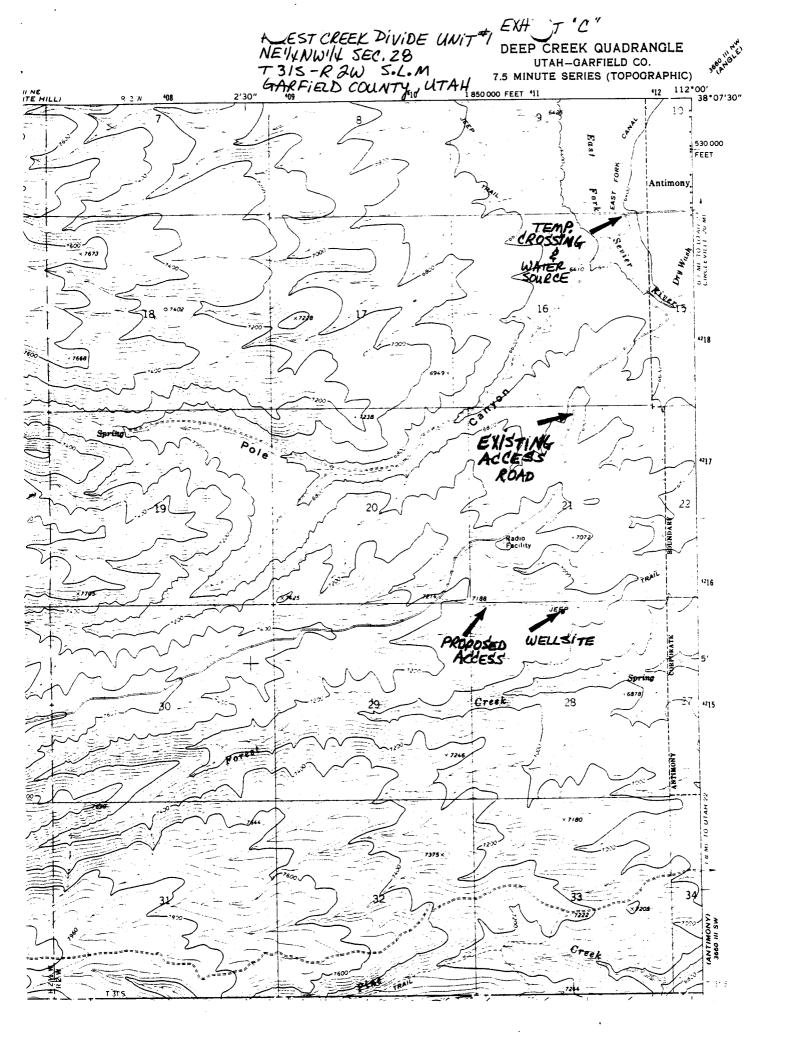
9. Rams will be used in following positions: (ARCO Drl. Supv. may reverse ram location)

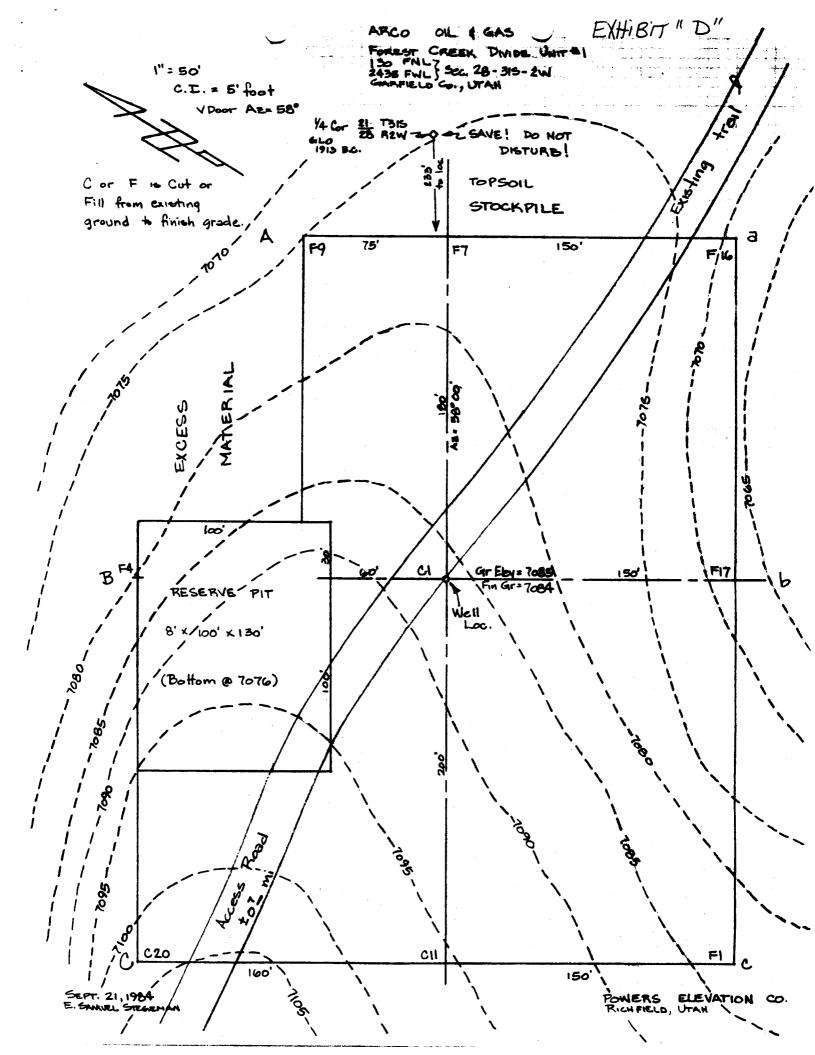
Drilling Running Casing Blind Blind Upper Ram Casing Rams Lower Ram Drillpipe

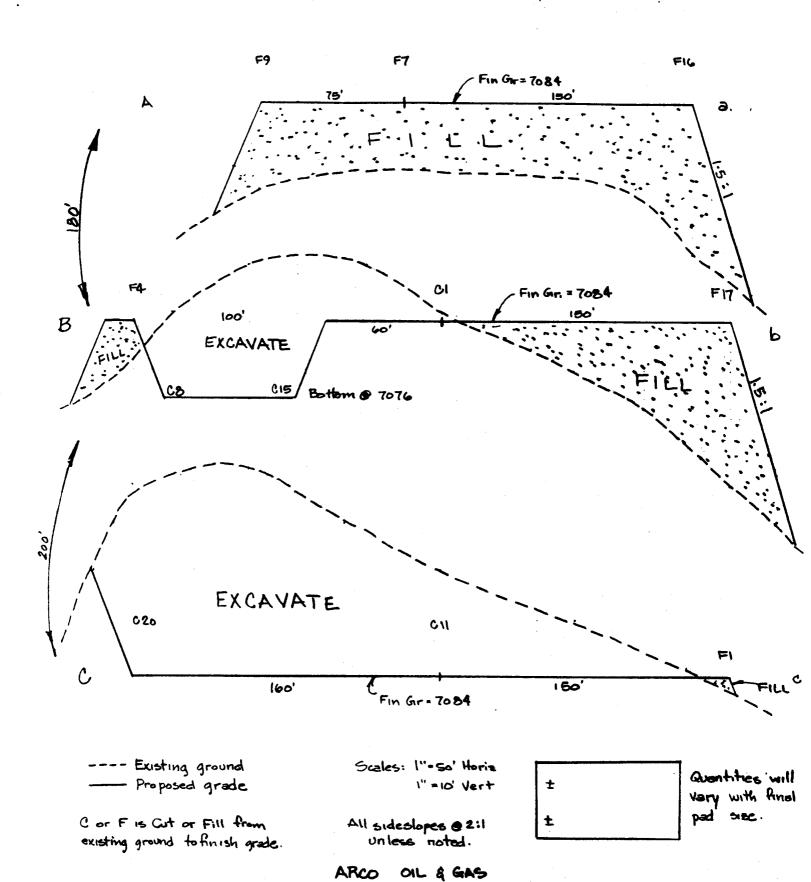
10. Minimum size for kill line is 2 inches nominal.

11. Extensions and hand wheels shall be installed.

ALL SPECIFICATIONS LISTED ARE PER API-RP53



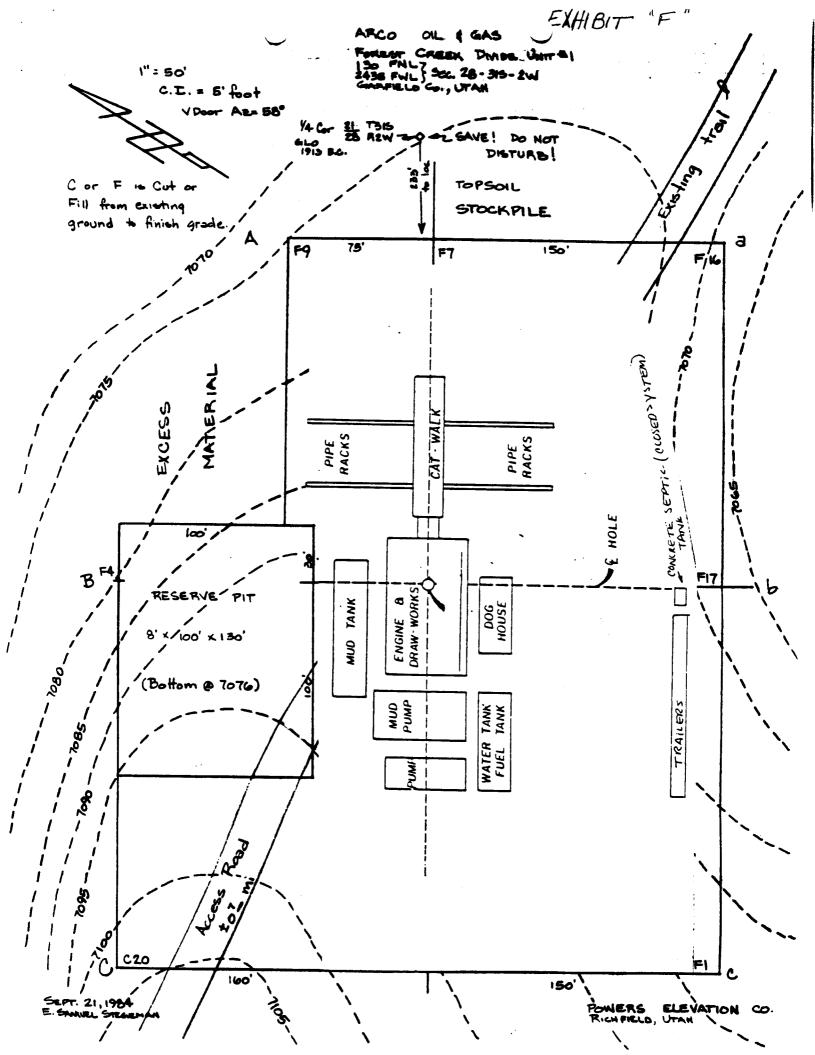


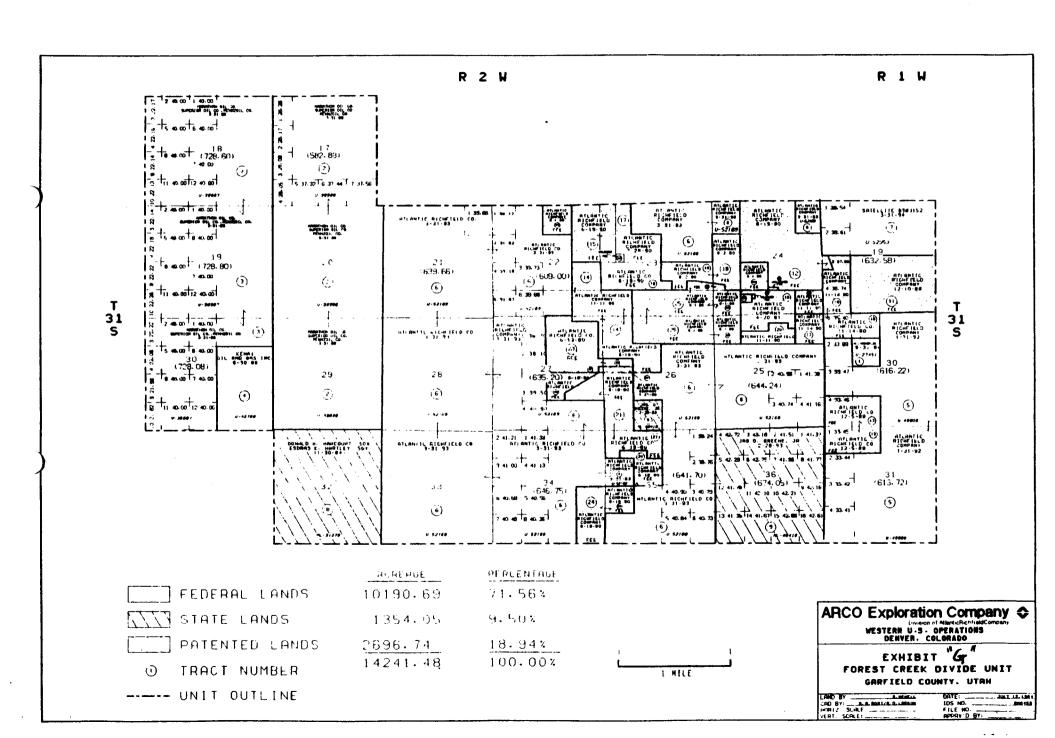


FOREST CREEK DIVIDE UNIT "! NE-NW 28-315-2W GARRIELD CO, UTAH

SEPT 21, 1984

POWERS ELEVATION CO. RICHFIELD, UTAH









September 24, 1984

Mr. Harry Engle
ARCO Oil & Gas Company
Division of Atlantic Richfield
Company
707 17th Street, Arco Tower
P.O. Box 5540
Denver, CO 80217

Dear Mr. Engle:

Enclosed is the cultural resources report for the following ARCO Oil & Gas Company location:

Forest Creek Divide Unit #1

Files searches conducted at the Division of State History and the Vernal District, BLM, revealed no sites or surveys previously reported within the project area. Our field survey revealed site 42GA2909, a lithic scatter/open campsite and an isolated artifact, a historic bitters bottle.

While the isolated find is not considered to be significant, site 42GA2909 is considered to be potentially eligible to the National Register of Historic Places. For this reason, we recommend that the project be allowed to proceed but that the well location be moved 100 feet west to avoid the site.

If you have any questions about this report, please feel free to call me. Thank you.

Sincerely,

Marcia J. Tate

Manager

Archaeology Department

Enclosure

CC: BLM, Kanab Resource Area
BLM, Cedar City District
BLM, Rich Fike, State Office
State Archaeologist/SHPO
Mr. Prian O'Noil Bowers Flourtie

Mr. Brian O'Neil, Powers Elevation

MT/kr

# Cultural Resource Management Report

ARCO Oil & Gas Company Forest Creek Divide Unit #1 Garfield County, Utah

Lead Field Investigator

Brian P. O'Neil, M.A.

Principal Investigator

Marcia J. Tate

Date Sept. 25, 1984 For ARCO Oil & Gas Company



## POWERS ELEVATION

600 SOUTH CHERRY ST., DENVER, COLORADO 80222

Archæology Division



A DIVISION OF PETROLEUM INFORMATION CORPORATION/A SUBSIDIARY OF A.C. NIELSEN COMPANY

Bureau	of	Land	Management
			Office

Summary Report of Inspection for Cultural Resources

	1 4	10
Report Acceptable	Yes No	
Mitigation Accepta	able Yes No	

١.	Report Title [F]O[R]E[S[T]   C R[E[E K]   D] I V I D E   U N I T   #   1       40
2.	Development Company ARCO Oil & Gas Company
3.	Report Date 09 18 1984 4. Antiquities Permit No.State Permit:
5.	Responsible Institution POWERS   E LEVATION County Garfield
6.	Fieldwork Location: TWN [3 1 S    Range [2 W      Section(s) [2 8
	TWN         Range         Section(s)
7.	Resource Area [K]A] TWN [ ]   Range [ ]   Section(s) [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [
	PO: PONY EXPRESS. BR: BEAR RIVER, PR: PRICE RIVER, WS: WARM SPRINGS  BC: BOOK CLIFFS HR: HOUSE RANGE, SE: SEVIER RIVER, HM: HENRY MOUNTAINS, BE: BEAVER RIVER, DX: DIXIE  KA: KANAB ES: ESCAL ANTE, SJ: SAN JUAN, GR: GRAND  SR: SAN RAFAEL, DM: DIAMOND MOUNTAIN.
e.	Description of Examination Procedures: A ten acre area surrounding the well pad center stake was surveyed by walking a series of parallel east-west transects at intervals of 15 meters, Arroyo cuts, and hills, and animal burrows were examined for evidence of buried cultural material. The access road was surveyed by zig-zag transects 50 feet each side of the center flags to form a 100 foot wide R.O.W. approximately 3000 feet long from its take off point along the Mt. Dutton/Jones Corral Guard Station (USFS) access road.
. 9.	Linear Miles Surveyed [1 7 A C R E] 10. Inventory Type [I]
	Definable Acres Surveyed
	Surveyed [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [
11.	One site, 42-GA-2909, an open lithic scatter/short term camp; No sites = 0 131 31 and one isolated find, FCD #1-1, a historic bitters bottle, were recorded within
	the surveyed project area.  13, Collection: Yarves, Namo

- 14. Actual/Potential National Register Properties Affected: Site 42-GA-2909 should be considered potentially eligible to the National Register of Historic Places in that the site is likely to yield significant scientific information on the prehistory of the area. This is due to its present integrity and relatively high (see continuation sheet)
- 15. Literature Search, Location/Cate: File searches were conducted on 9/10/84, at the Division of State History and Kanab Resource Area Office. (see continuation sheet)
- National Register Site, we recommend that the well location be moved 100 feet to the west in order to avoid the site. Isolated find FCD#1-1 has been collected and no further work is required. Given the above considerations, we recommend that the project be allowed to proceed. Should buried cultural materials be encountered during the construction of the project, all work should cease and the BLM resource area archaeologist notified.

17. Signature

locationals use additional 8100-3

8100-3 (3/82) ARCO Oil & Gas Company
Forest Creek Divide Unit #1
Continuation Sheet

Actual/ Potential National Register Properties Affected: ... density of cultural materials representing mixed hunting and gathering resource procurement. Both cultural identity and chronological placement data are represented.

Literature Search, Location/Date: ... No sites or surveys have been previously reported within the project area.

ARCO Oil & Gas Company
Forest Creek Divide Unit #1
80' FNL & 2,520' FWL
Sec 28 T.31S.,R.2W.
Deep Creek, 7.5', 1971.
Garfield, Utah



Looking NE at center stake.



## Part A - Administrative Data

ntermountain ah, Wyoming State	ry - Utah, Wyoming
Project	ARCO Oil & Gas Forest Creek Divide Unit #1
Report No.	
Site Name	
Class	Prehistoric
Site Type	Short Term Camp
Elevation UTM Grid	7080 ft. Zone 12 411280 m E 4215760 m
N	2010 111 L 1
Meridian	Salt Lake City
Map Refere	nce Deep Creek 7.5', 1971.
<b>Aerial Photo</b>	
Location an	Access From Utah State Hwy. 22 at the town of Antimony,
Guar	eed alone the USFS road to Mt. Dutton and the Jones Corral
	d Station 2.8 miles to the access road to ARCO Oil & Gas st Creek Divide Unit #1. Turn left. Follow the jeep trail
	ess road for 0.7 miles to the site, located near the souther
	er of the well pad.
Federal Adn Planning Ur Site Descrip	nin. Units Forest District <u>Cedar Ci</u> ty Nat'l Park its (USFS only) tion The site ia a small, open, short term camp centered
Site Descrip arou are trendebi and also surr	District Cedar City Nati Park  its (USFS only) tion The site ia a small, open, short term camp centered and hunting and gathering activities. Four distinct loci evident. The site is situated on the south side of an east- ding ridge just below the crest. Artifacts include lithic tage, biface fragments, projectile points, brown ware ceramical metate fragment. A utilized and a retouched flake were noted but not collected. There is a commanding view of the bounding area to the east and south. No features were observed.
Federal Adn Planning Ur Site Descrip arou are trendebi and also surr	District Cedar City Nati Park  its (USFS only) tion The site ia a small, open, short term camp centered and hunting and gathering activities. Four distinct loci evident. The site is situated on the south side of an east- ding ridge just below the crest. Artifacts include lithic tage, biface fragments, projectile points, brown ware ceramical metate fragment. A utilized and a retouched flake were noted but not collected. There is a commanding view of the
Federal Adn Planning Ur Site Descrip arou are tren debi and also surr Dest	District Cedar City Nat'l Park  its (USFS only)  tion The site ia a small, open, short term camp centered and hunting and gathering activities. Four distinct loci  evident. The site is situated on the south side of an east- ding ridge just below the crest. Artifacts include lithic tage, biface fragments, projectile points, brown ware ceramic a metate fragment. A utilized and a retouched flake were noted but not collected. There is a commanding view of the bunding area to the east and south. No features were observed truction by erosion is imminent.
Federal Adn Planning Ur Site Descrip arou are tren debi and also surr Dest  Site Condition Impact Ager	District Cedar City NatiPark  its (USFS only)  tion The site ia a small, open, short term camp centered and hunting and gathering activities. Four distinct loci  evident. The site is situated on the south side of an east- ding ridge just below the crest. Artifacts include lithic tage, biface fragments, projectile points, brown ware ceramical metate fragment. A utilized and a retouched flake were noted but not collected. There is a commanding view of the counding area to the east and south. No features were observed to by erosion is imminent.  The site is a small, open, short term camp centered that is a control of the control of
Federal Adn Planning Ur Site Descrip arou are trendebi and also surre Dest  Site Condition Impact Ager hold Nat. Registe Justify on ti	District Cedar City Nat'l Park its (USFS only) tion The site ia a small, open, short term camp centered and hunting and gathering activities. Four distinct loci evident. The site is situated on the south side of an east- ding ridge just below the crest. Artifacts include lithic tage, biface fragments, projectile points, brown ware ceramic a metate fragment. A utilized and a retouched flake were noted but not collected. There is a commanding view of the counting area to the east and south. No features were observed to by erosion is imminent.  The counting area to the counting term of the south of the site is likely to yield significant (D) Unevaluated (USFS only the site is likely to yield significant scientific information the prehistory of the area and should be tested or excavated
Federal Adn Planning Ur Site Descrip arou are tren debi and also surre Dest  Site Condition Impact Ager hold Nat. Registe Justify on to	District Cedar City NatiPark  its (USFS only)  tion The site ia a small, open, short term camp centered and hunting and gathering activities. Four distinct loci  evident. The site is situated on the south side of an east- ding ridge just below the crest. Artifacts include lithic tage, biface fragments, projectile points, brown ware cerami a metate fragment. A utilized and a retouched flake were noted but not collected. There is a commanding view of the bunding area to the east and south. No features were observance of the country of the site is likely to yield significant (D)  The site is likely to yield significant scientific information of the prehistory of the area and should be tested or excavated before it erodes away.
Federal Adn Planning Ur Site Descrip arou are trendebi and also surre Dest  Site Condition Impact Ager hold Nat. Registe Justify on ti	District Cedar City NatiPark  its (USFS only)  tion The site ia a small, open, short term camp centered and hunting and gathering activities. Four distinct loci evident. The site is situated on the south side of an east- ding ridge just below the crest. Artifacts include lithic tage, biface fragments, projectile points, brown ware cerami a metate fragment. A utilized and a retouched flake were noted but not collected. There is a commanding view of the bounding area to the east and south. No features were observant on the collected of the country of the site is likely to yield significant (D)  The site is likely to yield significant scientific information of the collected of the area and should be tested or excavated before it erodes away.  12 color prints

	Part A -	Environmental I	<b>Vata</b> si	le No.(s) 42-	GS-2909
Slope4 (	Degrees)150	Aspect (Degrees)			
Direction/Distance to P		5 Bearing (Degrees)	2.6	_x 100 Meters	
		Stream/River			Other (D)
*Type of Water Source	☐ Spring/Seep (A)			and (C)	לט) ופוווט ב
Name of Water Source		of Sevier Rive			
Distance to Nearest Oth	er Water Source/Type .	800 meters/s	pring in Fo	prest Cree	k Canyor
Geographic UnitB	asin and Rang	e - Colorado P	<u>lateau Tran</u>	nsition -	Lava_Car
Topographic Location (	check one under each he	ading)			
PRIMARY LANDFORM	PRIMARY POSITION	SECONDARY LANDFO	RM	SECONDARY PO	SITION
mountain spine(A)	□ top/crest/peak(A)	□ alluvial fan(A)	☐ playa(M)	≥ top/crest/pe	ak(A)
□ hill(B)	Sedge(B)	alcove/rock shelter(B)	port.geo.feature(N)	<pre>edge(B)</pre>	
☐ tableland/mesa(C)	☐ slope(C)	arroyo(C)	□ plain(0)	[] slope(C)	
☐ ridge(D)	toe/foot/bottom/mouth([	· · · ·	Z ridge/knoll(P) ☐ slope(Q)	☐ toe/foot/bot ☐ interior(G)	(Om/mouni(U)
Ø valley(E)  □ plain(E)	☐ saddle/pass(E) ☐ bench/ledge(F)	□ cave(E) □ cliff(F)	☐ terrace/bench(R)	☐ step(H)	
□ plain(F) □ canyon(G)	imrock(G)	☐ delta(G)	☐ talus slope(S)	☐ riser(I)	
island(H)	interior(H)	detached monolith(H)	island(T)	patterned gr	ound (N)
C 134.10(11)	S	dune(I)	□ outcrop(U)	face(0)	,
		☐ floodplain(J)	☐ spring mound/bog(\	/) 🔲 saddle/pass	(P)
		☐ ledge(K)	□ valley(W)		
		mesa/butte(L)	□ cutbank(X)		
mb -			☐ riser(Y)		
Describe Ine	site is locate	ed on the east	slope of t	<u>the Sevier</u>	<u>Plateau</u>
east of Mt		ridge top alo	ng the west	ern side	of the
East Fork	of the Sevier	River and over	rlooking th	ne river V	allev.
Vegetation *a. Life Zone □ Arc  *b. Community  Aspen(A)  Spruce-Fir(B)  Douglas Fir(C)  Alpine Tundra(D)  Ponderosa Pine(E)  Lodgepole Pine(F)	with gravel a tic-Alpine(A) Hudsonian  - Primary On-Site Other/Mixed Coni Pinyon-Juniper Wi Wet Meadow(I) Dry Meadow(J) Oak-Maple Shrub( Riparlan(L)	(B) Canadian(C) Tro	ansitional(D) 🖾 Upportune Upportune (M) Shore(N) community(O) sh(P) sh(Q)	er Sonoran(E)	ower Sonoran(F)
Describe Scat	ttered pinvon-	-juniper, sage	. native gr	asses, pri	ickly pe
cactus.	<u> </u>		<u> </u>		
Miscellaneous Text					
MITOCENSIENES 1 EXT					
Comments/Continuation	s/Location of Curated M	aterials and Records			
Artifacts a	ire curated at	aterials and Records  Southern Utal	h State Col	lege in Ce	edar Cit
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	<del></del>				
	· · · · · · · · · · · · · · · · · · ·				
•	. \				
ttachments: 🗷 Part	•	•		☐ Continuatio	n Sheets
☐ Part	C XI Site SI	cetch 🔯 Artifa	ct/Feature Sketch	Other	

☐ Part C

☒ Site Sketch

### Part B - Prehistoric Sites

						Site No.(s)	42-GA2909
1.	Site Type	Short term h	unting/	gathering	camp		
•2.	Culture	AFFILIATION S. Paiute		ATING -1700 AD	AF	FILIATION	DATING
3.	Site Dimensions	SW-NE	36 <sub>m X</sub>	NW-SE	17 <sub>m</sub>	*Area	612 <sub>sq m</sub>
4.	Surface Collectio	n/Method	☐ None (/			Designed Sa	
	Sampling Method	Diagno	Ğ Grab Sa ostics/pa	ample (8) atterned	tools/so	Complete Courceable	ollection (D)  in lithics
5.	Estimated Dapth	<b>K</b> 0-20	face (A) O cm (B)		0-100 cm (C) 00 cm + (D)		Fill noted but unknown (E)
	How Estimated (If tested, show it	road location on site map.	l cut )				
6.	Excavation Status Testing Method	Exca	avated (A)	***	☐ Tested (B	)	Ŭ Unexcavated (C)
	A contains white cher 2 biface secondary tion flake projectile secondary	tter (CS)  xtiles (BT)  our distinct l  s: 50 white our  rt reduction f  e fragments, a  and tertiary  e, 2 obsidian  e point fragments	☐ Organic ☐ Shell (Sithic scathert, secilakes, and 1 util reduction secondary ent. Locather	tters are ondary red d 2 reddis ized flake flakes, l reduction lity C con d/pink sec	evident: uction and h-brown ch , locality reddish-b lakes, an tains 4 mo ondary red	tertiary ert secon B contai rown, che d l pink- ttled gre uction fl	ne (GS) se(s) s A,B,C,D. Locality flakes, 11 grey
3.	Lithic Tools	# 2 h	TYP oiface fra			<b>#</b>	TYPE
			roj. pt.	fragments			
			retouched utilized f		<del></del>		
		1 F	asin/trou	gh metate			oction approvimate
	Describe	and 17mm wide	by 5mm t	hick., l c	olitic che	rt biface	ection, approximate fragment-dark poin
	mid-section mottled d	on-approximate hert projectil base. See dra	ely 31mm 1 e point f	ong and 24	mm wide by	6mm thic	k., 2 pink/white
١.	Lithic Debitage - (	Estimated Total Quan		□ None (A) □ 1-9 (B)	□ 10 □ 25	)-25 (C) 5-100 (D)	Ø 100-500 (E) □ 500 + (F)
	Material Type _ Flaking Stages Decortication _	(0) Not Pre		e chert, r (1) Rare Tertiary	(2) Com		ish-brown chert.  (3) Dominant Core 0
١.	Maximum Density	-#/sq m (all lithics)		/sq. m.			<del>-</del>

Temper is medium to fine and is quartz and basalt (?). Thickness is 5mm both are body sherds.  Maximum Density-#/sq m(ceramics)					Site	No.(s)	42-GA-2909
TYPE  2 S. Paiute utility ware    Describe   Describe	Coromin A -414						
Describe	Ceramic Artitact	•	S. Paiute	<u> </u>			ТҮРЕ
Temper is medium to fine and is quartz and basalt (?). Thickness is 5mm both are body sherds.    Maximum Density-#/sq m (ceramics)   2/sq. m.			ucrircy war				
Temper is medium to fine and is quartz and basalt (?). Thickness is 5mm both are body sherds.  Maximum Density-#/sq m(ceramics)	Describe has shall	coiled male	edium brown exte	rior with da s giving a se	rk gray omewhat	interior. banded ap	Exterior pearance.
Non-Architectural Features (locate on site map)   Hearth/Firepit (HE)	Temper is	s medium to	fine and is qua	rtz and basa	lt (?).	Thicknes	s is 5mm
Hearth/Firepit (HE)	Maximum Densi	ty-#/sq m (ceran	nics) 2/sq. m	•			
Architectural Features (lacate on site map)  MATERIAL TYPE  MATERIAL TYPE  Describe  N/A	<ul><li>☐ Hearth/Fire</li><li>☐ Midden (Mi</li><li>☐ Depression</li></ul>	pit (HE)	Rubble Mound (RM)  Stone Circle (SC)	Burial (BU)		Petroglyph (P	E)
MATERIAL TYPE  MATERIAL TYPE  MATERIAL TYPE  Describe  N/A	Describe		I/A				
MATERIAL TYPE  MATERIAL TYPE  MATERIAL TYPE  Describe  N/A							
MATERIAL TYPE  MATERIAL TYPE  MATERIAL TYPE  Describe  N/A							
N/A							
N/A					,	MATERIA	AL TYPE
						MATERIA	AL TYPE
Comments/Continuations			TYPE		<u>*</u>	MATERIA	AL TYPE
Comments/Continuations	<u>'</u>		TYPE			MATERIA	AL TYPE
Comments/Continuations	<u>'</u>		TYPE			MATERIA	AL TYPE
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	Describe	MATERIAL	TYPE			MATERIA	AL TYPE
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	Describe	MATERIAL	TYPE			MATERIA	AL TYPE
	Describe	MATERIAL	TYPE			MATERIA	AL TYPE
	Describe	MATERIAL	TYPE			MATERIA	AL TYPE
	Describe	MATERIAL	TYPE			MATERIA	AL TYPE
	Describe	MATERIAL	TYPE			MATERIA	AL TYPE

ARCO Oil & Gas Company Forest Creek Divide Unit #1 Continuation Sheet

Summary of Artifacts and Debris, Description: ...reduction flake, 1 retouched flake, 1 metate fragment, 2 S. Paiute brown sherds & locality D contains 10 secondary reduction flakes and 1 pink/white chert projectile point fragment.

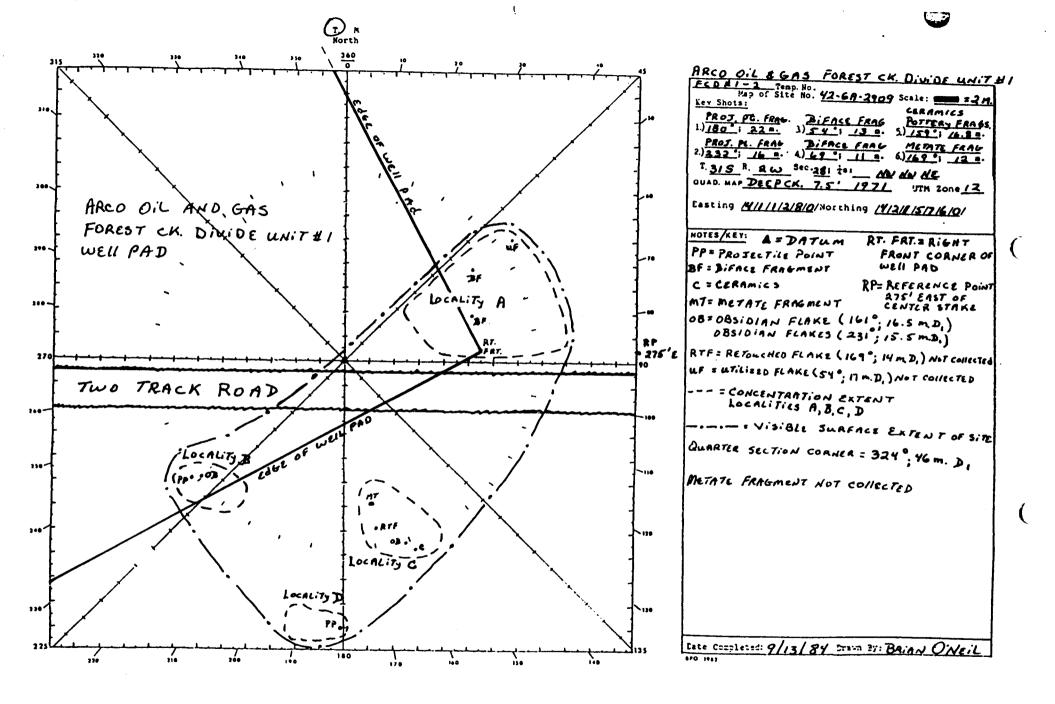
## IMACS ENCODING FORM

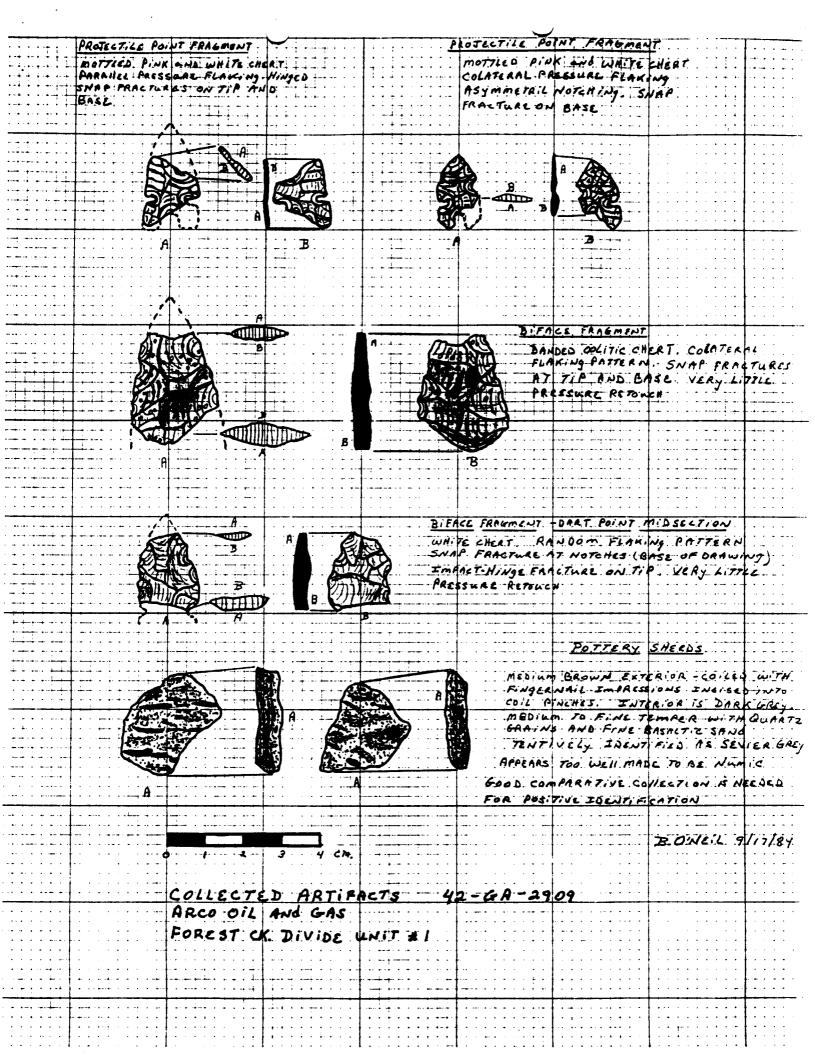
To be completed for each site form.
For instructions and codes, see IMACS Users Guide.

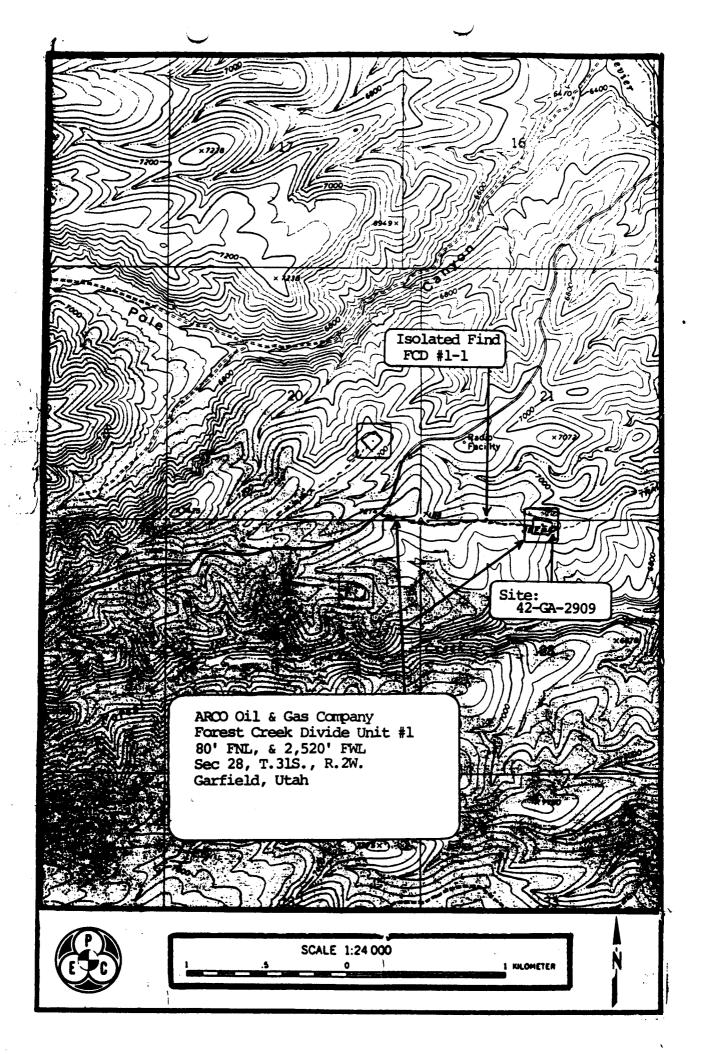
Encoder s Name \_\_\_ Brian O'Neil

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Α	12 NW NW NE 2 8	3,1 S Ø, Ø, 2	W 131			Zone Eas	tong horthing	
	Sec		14	D, E, E, P, , C,	R.E. EK. 75, USGS Map	1,9,7,1 1	ليليا ٠٠ ليليا	B 4 District/Park
	Capab Aniys Mgmt	21C 22D, E	E E R G R 23	3 C 26 P A Organ	28 Ø9 - 13 - 84 Survey Dale		5 Ø	(
	30 0/25 Ø 26 B Water degrees dist /type	31 TDF 32 EB	PA 33U Calion	34 E QHH 1 2 3 Vegetation	35	Misc Text		
	2 U.P.M.	Area	4 B 5 B Depth	6 C 7 1 Exca Status	CS		1 I A 2 E A 1 I J 1 M A	
B	Culture Gale	9E Ø 3	2 1 Ø		q <sub>i</sub> S Arhiacis #/lype		2 I G Link Tools #/hype	
	112FA Ceramics #/Type	1		calures #/type	14	Archite	Clure e/maleriai/fype	
	2	3	Cultures/Daling	4	Dates	5 Avea	6 D 7 Depth	8
C	9 Antiacis d/type	10 Ceramin	CS #/lype/lamrk/dec	Glass #/molt /color		13	Ceatures #/hpte	
	14			Architecture #/material/type				

LETTERING GUIDE A B C D E F G H I J K L M N O P Q R S T U V W X Y Z 123456789Ø









# HERITAGE DIVISION CULTURAL RESOURCE RECORD

<b>O</b> SITE		)
<b></b> ISOLATED	FIND	)

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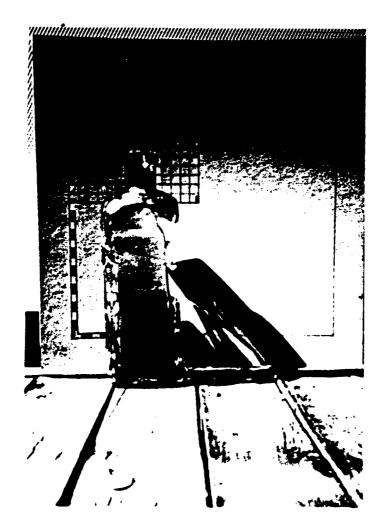
	PROJECT IDENTIFICATION							
1.	Site Name Field No. FCD #1-1 Site No. FCD #1-1							
	Project Name ARCO Oil & Gas Forest Creek Divide Unit #1							
	Landowner Status Kanab Resource Area - Cedar City District							
	Federal (Specify Agency) BLM State County Indian Private							
2.	Recorded by B. O'Neil Date 9/12/84 Permit No. 84-UT-218;							
	State: U-84-5-59B.							
	LOCATION							
3.	State Utah County Garfield							
	20 ft. FNL, 1350 ft. FWL; NE & NE & NE & NW &, Sec 28 , T 31S , R 2W							
	UTM Zone 12 Easting /4/1/0/8/5/0/ Northing /4/2/1/5/8/3/1/ PM SIC							
	Quad Name & Series Deep Creek, 7.5' 7.5' 7.5' 7.5' 7.5' 7.5' 7.5' 7.5'							
4.	ACCESS: Ofoot X car O4-Wheel drive; Ofencing (?) Osigns (?) Directions to Site (include nearest roads, community, direction, etc.): From Utah							
	State Hwy. 22 at the town of Antimony, proceed along the USFS Rd. to Mt. Dutton and							
	the Jones Corral Guard Station 2.8 miles to the jeep trail. Turn left. follow							
	trail (access Rd. to ARCO Oil & Gas Forest Creek Divide Unit #1) .4 of a mile							
	to site.							
	ARTIFACT ASSEMBLAGE							
5.	Artifact Description (include material, lithic, ceramic, structures, bone, etc., dimensions, morphology, diagnostic or not, inferred function, etc.):							
	Isolated find consists of one historic broken bottle-square-purple glass-inscription							
	reads, "Kennedys East Indian Bitters, Iler & Co., Omaha, Nebraska" Height=9inche							
	Base= 3 inches square, Neck/mouth opening= .75"							
6.	Cultural Affiliation Euroamerican Time Period 1882-1901							
7.	Surface Collection  x yes  ono (if yes, attach list); Methodology							
	All visible pieces of glass (see photos attached)							
8.	Artifacts permanent repository Southern Utah State College - Cedar City							
9.	Artifact drawings made? Oyes 🗑 no (if yes, attach list).							
10.	Photo? X yes Ono Powers Elevation - Grand Junction file location.							

ATTACH A PHOTOCOPY OF USGS QUAD MAP, SHOWING SITE OR ISOLATED FIND CLEARLY.

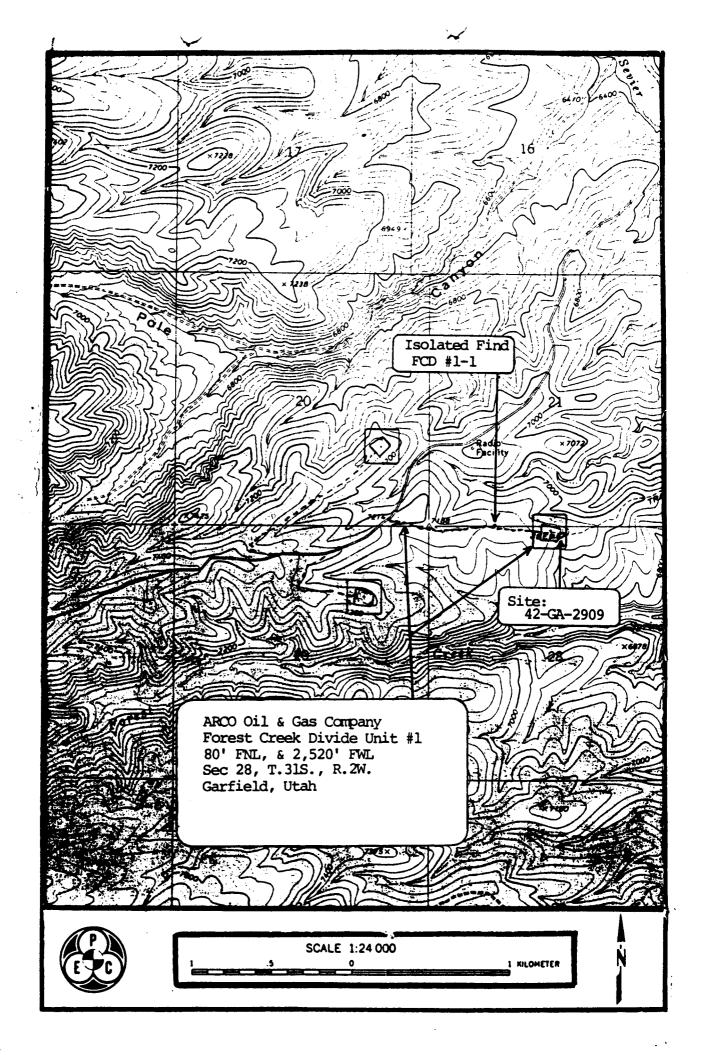
\*\* Write in narrative form, using complete grammatical sentences.

				√ EI	NVII	ronn	1EN1	TAL DATA	\												_
11.		•	•	phy	(ir	nclu	ıde	bedroc	an												-
	trending ridges on the east flank of the Sevier Plateau. Farmed through dissection																				
	of the Quichapa Formation by intermittent and permanent tributaries to the Fast																				
	Fork of the Sevier River. Latite and basaltic cobbles are common from																				
	Quarternary deposits.																				
		·					-	<del></del>													-
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12.																					_
12.						-		DE	OSI	TIO	NAI	ENVI	RON	MEN	T						
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	X   Mountains   Hill   Plain		I .		d	cave/shelter	lta	alluvial/ colluvial plain		۵		a	18	plain			shore/beach		ds		
	Plain		arroyo, etc.	#	outcrop	s/a	fan/delta	in Si	Su	moraine	p	stream terrace	stream	8		sh	re/	island	badlands	Bridge	
	Valley		etc.	cliff	g	cav	fan	all pla	talus	ē.	mound	str	gtr	flood	playa	marsh	orus	isl	paq	Bri	
	Valley Canyon				<u> </u>																
			1.00							ليا		<u> </u>						<u> </u>		×	_
	TOPOGRAPHIC	XX		res	t/p	еак						m/bas	e		-	+	im		•		
	LOCATION	├─	edge slope	/ei	do	<del></del>			saddle/pass cutbank bench/ledge												
		<u> </u>	STOP	5/ 51	<i>ae</i>				erc.	:1/10	eug	<del></del>				<u>L</u>					_
13.	Soil Type (inclu	de	color,	te	xtu	re,	de	pth, et	c.)	:	Lig	ht Re	ddi	sh/	bro	wn	san	dy	loa	m	_
	mixed with la										es.	Dep	th	of	Qua	rte	rna	ry (	dep	osi	:s
	is estimated a	at ]	20 ft.	<u>.</u> s	ite	de	pth	is 5-	.0an	١.		7							. <del>.</del>		-
3.4									·												-
14.	Vegetation (gene											•			-		_				-
	Sonoran Life and prickly pe				of	pi	non	-junipe	r/s	<u>age</u>	<u></u> ∞	mmuni	<u>tie</u>	s w	<u>ith</u>	na	<u>tiv</u>	e g	ras	ses	-
	an prickly pe	Sal	Caccus					<del></del>													-
15.	Water: Directio	n to	o NNE	E (2	50)		ni e i	tance t		) vem a	2001	at was		•	2.7	5 kg	—— m .	7			•
	Type/Name Permar										111C1	it wa	Ler	•—							-
	Distance to near							(120 <sup>O</sup> )			Cr	eek -	in	ter	mit	ten	t 7	sp	rin		-
16.	Contemporary fau																				
		-				tı	raci	<s< td=""><td>Х</td><td></td><td>12</td><td>ore</td><td></td><td></td><td></td><td></td><td>al</td><td>1</td><td></td><td></td><td>-</td></s<>	Х		12	ore					al	1			-
17.	Ground visibility						5	<b>%.</b>			'										
18.	Elevation:	_					fee	 et	2,	179		met	ters	<b>(</b> 1	ft.	х .	. 304	48).	•		
				_																	

ARCO Oil & Gas Company
Forest Creek Divide Unit #1
20' FNL, & 1,350' FWL,
NE¼,NE¼,NE¼,NW¼
Sec 28, T.31S., R.2W.
Garfield, Utah



Isolated Find FCD #1-1
Historic Bottle
"Kennedy's East Indian Bitters"
Iler & Co., Omaha, Nebraska.



ARCO Oil and Gas Company
Rocky Mountain District
707 17th Street
Mailing address: P.O. Box 5540
Denver, Colorado 80217
Telephone 303 293 4600



October 5, 1984

Mr. Virge Brown Otter Creek Reservoir Company P.O. Box 15 Annabella, Utah 84711

RE: Culvert Installation Forest Creek Divide Unit #1 Garfield County, Utah

#### Dear Mr. Brown:

This letter serves as an agreement between ARCO Oil & Gas Company and Otter Creek Reservoir Company, for ARCO to adhere to all stipulations as stated below in regards to installation of a culvert for the access road to the Forest Creek Divide Unit #1 well to be drilled in Garfield County, Utah:

- The culvert will be 6' in diameter and is to be located upstream from the diversion gates to be certain not to cause interference with present irrigation in SE/4 SE/4, Section 16-T31S-R2W, Garfield County, Utah.
- If the well is plugged and abandoned, the area will be restored to original conditions in as much as is possible.
- 3. If the well is productive, the culvert will be removed after completion operations and a permanent structure will be installed.
- 4. ARCO will be responsible for any damages resulting from overflow if the culvert is not removed prior to spring run off.

If you have any questions regarding this agreement, please contact me at (303)293-1077.

Sincerely,

Suzanne M. Barnes

Drilling Engineer Tea

KUF

SMB/gc

cc: Well file

OPERATOR Aco Oil x Las Co. DATE 10-9-84.
WELL NAME Soust Creek Devide And #1
SEC NE NW28 T 315 R 2W COUNTY Sarfield
43-017-30127  API NUMBER  TYPE OF LEASE
POSTING CHECK OFF:
INDEX
NID PI
MAP
PROCESSING COMMENTS:
Med witer permit
The firms
APPROVAL LETTER:
SPACING: A-3 Frest Creek Devide C-3-8 UNIT CAUSE NO. & DATE
с-3-ь
SPECIAL LANGUAGE: _/- Watu

RECONCILE WELL NAME AND LOCATION ON APD AGAINST SAME DATA ON PLAT MAP
AUTHENTICATE LEASE AND OPERATOR INFORMATION
VERIFY ADEQUATE AND PROPER BONDING
AUTHENTICATE IF SITE IS IN A NAMED FIELD, ETC.
APPLY SPACING CONSIDERATION
ORDER
UNIT
с-3-ь
с-3-с
CHECK DISTANCE TO NEAREST WELL.
CHECK OUTSTANDING OR OVERDUE REPORTS FOR OPERATOR'S OTHER WELLS.
IF POTASH DESIGNATED AREA, SPECIAL LANGUAGE ON APPROVAL LETTER
IF IN OIL SHALE DESIGNATED AREA, SPECIAL APPROVAL LANGUAGE.



4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

October 15, 1984

Arco Oil and Gas Company A Division of Atlantic Richfield Company P. O. Box 5540 Denver, Colorado 80217

### Gentlemen:

Re: Well No. Forest Creek Divide Unit #1 - NE NW 28, T. 31S R. 2W 130' FNL, 2435' FWL - Garfield County, Utah

Approval to drill the above referenced oil well is hereby granted in accordance with Section 40-6-18, Utah Code Annotated, as amended 1983; and predicated on Rule A-3, General Rules and Regulations and Rules of Practice and Procedure, subject to the following stipulations:

 Prior to commencement of drilling, receipt by the Division of evidence providing assurance of an adequate and approved supply of water.

In addition, the following actions are necessary to fully comply with this approval:

- Spudding notification to the Division within 24 hours after drilling operations commence.
- Submittal to the Division of completed Form OGC-8-X, Report of Water Encountered During Drilling.
- Prompt notification to the Division should you determine that it is necessary to plug and abandon this well. Notify John R. Baza, Petroleum Engineer, (Office) (801) 533-5771, (Home) 298-7695 or R. J. Firth, Associate Director, (Home) 571-6068.
- 4. Compliance with the requirements and regulations of Rule C-27, Associated Gas Flaring, General Rules and Regulations, Oil and Gas Conservation.

Page 2 Arco Oil and Gas Company Well No. Forest Creek Divide Unit #1 October 15, 1984

5. This approval shall expire one (1) year after date of issuance unless substantial and continuous operation is underway or an application for an extension is made prior to the approval expiration date.

The API number assigned to this well is 43-017-30127.

Sincerely,

R. J. Firth

Associate Director, Oil & Gas

as

**Enclosures** 

cc: Branch of Fluid Minerals

## UNITED STATES DEPARTA IT OF THE INTERIOR

May Los

	AL SURVEY	U-52169 expires 3/31/93
APPLICATION FOR PERMIT TO	DRILL, DEEPEN, OR PLUG E	ACK  6. IF INDIAN. ALLOTTER OR TRIBE NAME  N/A
IA SERVICE AT TARK	DEEPEN - PLUG BA	Forest Creek Divide
OIL X GAS OTHER	SINGLE TO MULTIE	
2. NAME OF OPERATOR ARCO Oil and Gas Co., A Division	of Atlantic Richfield Compa	N/A 9. WELL NO. Forest Creek
3. ADDRESS OF OPERATOR P.O. Box 5540, Denver, CO 80217		Divide Unit #1  10. FIELD AND POOL. OR WILDCAT
4. LOCATION OF WELL (Report location clearly and in a 130 FNL & 2435 FWL (NE/4 NW/4) Se	ccordance with any State requirements.*)	Wildcat  11. SBC., T., B., M., OR BLE. AND SURVEY OR AREA NE. 4 NW/4
At proposed prod. some approx. the same	e	Sec. 28-T31S-R2W S.L.M.
14. DISTANCE IN MILES AND DISSCTION PROM NEAREST Approx 3.5 miles SW of Antimony,	TOWN OR POST OFFICE®	Garfield Utah
13. DISPANCE FROM PROPUGED*	16. NO. OF ACRES IN LEASE	17. NO. OF ACRES ASSIGNED TO THIS WELL
(Also to secret drig. usit line, if any 2433	5304.07 19. PROPOSED DEPTE	Not assigned 20. BOTABY OR CASLE TOOLS
OR APPLIED FOR ON THE LEASE, FT. NA	3800'	ROTARY  22. APPROX. DATE WORE WILL START*
21. ELEVATIONS (Show whether DF. RT. GR. etc.) Ground elevation: 7085		October 20, 1984
	POSED CASING AND CEMENTING PROGE	AM

## RECEIVED

reverse side:

OCT 2 2 1984

DIVISION OF OIL GAS & MINING

DATE 18 Oct - 1984
DATE 10 CC - FFE
_

NOTICE OF APPROVAL

FLAIRING OR VENTING OF GAS IS SUBJECT TO NTL4-A DATED 1/1/80

to Virtual

Record GLO plat 177 Found corner

() Field measure

EXHIBIT "B"

Found GLO 1913 B.C. R. 2 W. Found GLO 1913 B.C. marked 1/4 EI TSIS EB RZW (Basis of bearing: 2630.291) N 89° 53'W 2435 2 21 T315 FNL 29 28 R2W CWell Loc. (FOREST CRECK DIVIDE UNIT #1) wyrock pile Gr Elev @ Loc. = 17085 N 89° 56' W 79.66 ch+ Scale... I" = 1000'

> Powers Elevation of Denver, Colorado has in accordance with a request from HARRY ENGLE for ARCO OIL & GAS determined the location of Forest Creek Divide Unit #1 to be 130' FNL & 2435' FWL of Section 28 Township 31 south Range 2 West of the SALT LAKE Meridian GARFIELD COUNTY, UTAH

DUR. OF LAND MCMT. DEAT. OF INTERIOR

00 6 W 1- 100 986!

I hereby certify that this plat is an accurate representation of a correct survey showing the location of

BORD MADE TRAIN

Date: Sept. 21, 1984

State of Colorado

"Utah exception

20596

T. 315.

### CONTIONS OF APPROVAL FOR NOTICE TWIRLL

Company:	ARCO Oil & Gas Company	Well No: Forest Creek Divide Unit #1
Location:	130' FNL 2435' FWL NE NW4	Lease No:U <u>-52169</u>
	Sec 28, T.31S., R.2W., SLB&M	

## A COPY OF THESE CONDITIONS SHOULD BE FURNISHED YOUR FIELD REPRESENTATIVE TO INSURE COMPLIANCE

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR 3160), approved plan of operations. The operator is considered fully responsible for the actions of his subcontractors. The following items are emphasized:

- 1. There shall be no deviation from the proposed drilling and/or workover program as approved. Safe drilling and operating practices must be observed. All wells, whether drilling, producing, suspended, or abandoned shall be identified in accordance with 43 CFR 3162.6. Any changes in operations must have prior approval of this office. Pressure tests are required before drilling out from under all casing strings set and cemented in place. Blowout preventer controls must be installed prior to drilling the surface casing plug and will remain in use until the well is completed or abandoned. Preventers will be inspected and operated at least daily to insure good mechanical working order, and this inspection recorded on the daily drilling report. Preventers will be pressure tested before drilling casing cement plugs. All BOP pressure tests must be recorded on the daily drilling report.
- 2. All shows of fresh water and minerals will be reported and protected. A sample will be taken of any water flows and furnished this office for analysis. All oil and gas shows will be adequately tested for commercial possibilities, reported and protected.
- 3. No location will be constructed or moved, no well will be plugged, and no drilling or workover equipment will be removed from a well to be placed in a suspended status without prior approval of this office. If operations are to be suspended, prior approval of this office must be obtained and notification given before resumption of operations.

In the event abandonment of the hole is desired, an oral request may be granted by this office, but must be timely followed within 15 days with a "Notice of Intention to Abandon" (Form 3160-5). Unless the plugging is to take place immediately upon receipt of oral approval, the District Manager must be notified at least 48 hours in advance of the plugging of the well in order that the representative may witness plugging operation. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form 3160-5) must be submitted within 15 days after the actual plugging of the well bore, reporting where the plugs were placed, and the current status of the surface restoration. If surface restoration has not been completed at that time, a followup report on Form 3160-5 should be filed when all surface restoration has been completed and the location is considered ready for final inspection.

4. The spud date will be reported orally to the respective District Manager's office within 48 hours after spudding. If the spudding occurs on a weekend or holiday, wait until the following regular workday to make this report.

Periodic drilling progress reports must be filed directly with the District Office on a frequency and form or method as may be acceptable to the District Manager.

In accordance with NTL-1, this well must be reported on Form 3160-6 "Monthly Report of Operations," starting with the month in which operations commence and continue each month until the well is physically plugged and abandoned. This report should be filed, in duplicate, directly with Royalty Management Accounting Center, Minerals Management Service, P.O. Box 2859, Casper, Wyoming 82602.

Any change in the program must be approved by the District Manager. "Sundry Notices and Reports on Wells" (Form 3160-5) must be filed for all changes of plans and other opreations in accordance with 43 CFR 3162.4.1. Emergency approval may be obtained orally, but such approval does not waive the written report requirement. Any additional construction, reconstruction, or alteration of the facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground will require the filing of a suitable plan pursuant to NTL-6, and prior approval by the District Manager.

- 5. Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (Form 3160-4) will be submitted not later than 15 days after completion of the well or after completion of operations being performed, in accordance with Onshore Oil and Gas Order No. 1; VIII. Reports and Activities Required after Well Completion. Two copies of all logs run, core descriptions, core analyses, well-test data, geologic summaries, sample descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, will be filed with Form 3160-4. Samples (cutting, fluid, and/or gas) will be submitted only when requested by this office.
- 6. Significant surface values are not involved at this location. Accordingly, you must notify the District Manager at least 24 hours prior to commencing field operations to allow this office to have personnel present for consultation during the construction of roads and locations.

The Cedar City District Office Address is:

1579 North Main, Cedar City, Utah 84720 (801) 586-2401

Your contact is:

Theron Mitchell

Office Phone: (801) 586-2401

Home Phone (801) 826-4347 or 586-2719

7. Unless otherwise specified herein, construction and maintenance of surface facilities approved under this plan shall be in accordance with the guidelines set forth in the BLM/FS/GS Oil and Gas Brochure entitled, "Surface Operating Standards for Oil and Gas Exploration and Development." This includes but is not limited to such items as road construction and maintenance, handling of top soil and rehabilitation.

- Notice" to that effect must be filed, for prior approval of the District Manager, and all conditions of this approved plan are applicable during all operations conducted with the replacement rig.
  - 9. Pursuant to NTL-2B requirements regarding disposal facilities for new wells, this is authorization for unlined pit disposal of the water produced from this well for a period of 90 days from the date of initial production for sales purposes. During this period, an application for approval of the permanent disposal method, along with the required water analysis and other information must be submitted for the District Manager's approval. Failure to timely file an application within the time allowed will be considered an incident of noncompliance, and will be grounds for issuing a shut-in order until the application is submitted.
  - 10. This permit is valid for a period of one year from the date of approval. If construction does not commence within 90 days from approval, the operator must contact this office 15 days prior to beginning construction. Construction under adverse conditions may require additional stipulations. If the permit terminates, any surface disturbance created under the application must be rehabilitated in accordance with the approved plan. After termination, it is required that a new application be filed for approval for any future operations.
  - 11. If a tank battery is constructed on this lease, it must be surrounded by a fire wall of sufficient capacity to adequately contain the storage capacity of the battery.
  - 12. This Application for Permit to Drill is approved subject to the requirement that, should the well be successfully completed for production, this office must be notified when it is placed in a producing status. Such notification will be by telegram or other written communications, and must be received in this office by not later than the first business day next following the date on which the well is placed on production. The notification shall provide, as a minimum, the following informational items:
    - a. Operator name, address and telephone number.
    - b. Well name and number.
    - c. Well location (4,4 Section, Township, Range and Prime Meridian).
    - d. Date was placed in a producing status.
    - e. The nature of the well's production, i.e. crude oil, or crude oil and casinghead gas, or natural gas and entrained liquid hydrocarbons.
    - f. The OCS, Federal or Indian lease prefix and number of which the well is located, otherwise, the non-Federal or non-Indian land category, i.e. State or private.
    - g. If appropriate, the unit agreement name, number and participating area name.
    - h. If appropriate, the communication agreement number.

#### SUPPLEMENTAL STIPULATIONS OF APPROVAL ATTACHED

Mud pits shall be based in at least four feet of cut material, that is with at least four feet of the pit below the existing ground surface, with any embankment of fill material key seated to ensure pit stability and fluid retention. Lining of pit is not considered necessary.

Reclamation shall include contouring of the pad to blend with land-forms in the general area, redistribution of top soil and seeding. Seeding shall be accomplished during the period of September to December. A seed mix and seeding method will be provided by the BLM Escalante Resource Area with the advent of reclamation.

Upon completion of drilling operations, the Cedar City District Office shall be notified of production and/or reclamation plans so that an inspection may be conducted to determine if mitigating measures in addition to those included in the surface use plan or presented hereby are necessary.

ARCO Oil and Gas npany
Rocky Mouritain District
707 17th Street
Mailing address: P.O. Box 5540
Denver, Colorado 80217
Telephone 303 293 4600



## RECEIVED

NOV 1 3 1984

DIVISION OF OIL GAS & MINING

November 9, 1984

State of Utah
Department of Natural Resources
Division of Oil, Gas and Mining
4241 State Office Building
Salt Lake City, Utah 84114

Re: Monthly Report of Operations
Well No. Forest Creek Divide Unit #1
NE NW, Sec. 28-31S-2W
Garfield Co., Utah

#### Gentlemen:

Attached, in duplicate, is the Monthly Report of Operations for the month of October , 19 84, on the subject well.

and the control of th

This well was spudded on October 31, 1984.

Very truly yours,

B.R. Stell

B. R. Still

Supervisor, Operations Info. Group

BRS:af

Form 3160-5	TICHT HOLE UNTIED ST		SUBMIT IN TRIPLE	Form approved. Budget Bureau	No. 1004-0135
(November 1983) (Formerly 9-331)	DEPARTMENT OF THE	HE INTERIOR	SUBMIT IN TRIPL CAT (Other instruction on verse side)	Expires August  5. LEASE DESIGNATION  U-52169	
SUNI	DRY NOTICES AND Form for proposals to drill or to Use "APPLICATION FOR PERM	REPORTS ON	WELLS o a different reservoir.	6. IF INDIAN, ALLOTTER	OR TRIBE NAME
	Use "APPLICATION FOR PERM	IT—" for such propose	ds.)	NA NA	
OIL X GAS WELL [	OTES			7. UNIT AGREEMENT NA Forest Creek D	ivide
2. NAME OF OPERATOR	C Dividadas	as Atlantia	Pichfield Compa	8. FARM OR LEASE NAM	
ARCO U11 and G	as Company, Division	1 OI ALIANLIC	Kichileld Compa	9. WBLL NO.	
P.O. Box 5540	Denver Colorado 8	30217		Divide Unit #1	_
i. LOCATION OF WELL (Re See also space 17 belov At surface	port location clearly and in accor	rdance with any State	requirements.*	10. FIELD AND FOOL, OF	WILDCAT
130	Den ver, Colorado & port location clearly and in account.  ' FNL & 2435' FWL N	NE/4 NW/4	OF VIA	11. SEC., T., R., M., OR B SURVEY OR ARMA	LE. AND
			. **	28-31S-2W	
14. PERMIT NO.	15. ELEVATIONS	(Show whether DF, RT, o	R, etc.)	12. COUNTY OR PARISE	18. STATE
43-017-30127	70	085' GL		Garfield	Utah
16.	Check Appropriate Box	To Indicate Natur	e of Notice, Report, o	r Other Data	
N	OTICE OF INTENTION TO:	1	8034	EQUENT REPORT OF:	
TEST WATER SHUT-OFF	PULL OR ALTER CAS	NING	WATER SHUT-OFF	REPAIRING W	FREE
FRACTURE TREAT	MULTIPLE COMPLET		FRACTURE TREATMENT	ALTERING CA	<u> </u>
SHOOT OR ACIDIZE	ABANDON®		SECOTING OR ACIDIZING	ABANDONMEN	IT*
REPAIR WELL	CHANGE PLANS		(Other) SPUD AND		
(Other)	, ,		(Note: Report rest Completion or Reco	nits of multiple completion of inpletion of multiple completion Report and Log for	on Well
MI & RU An set @ 92'K RU and ran	derson Myers Rig #7 B. SPUD 14-3/4" how 29 jts 10-3/4" 40.1 ith 300 sx lite + 32 iss "H" with 2% CaCl	; 22" hole du le 11-1-84. 5#, K-55, STC % CaCl. + 1/4	e to 78' and 16" Drilled ahead to casing and set #/sx flocele fol	pipe 1185'. @ 1185'. lowed by	
Drilling a	head 11-8-84.		_		
			*	RECEIVEL	·· ••
			?:		)
				<b>NOV</b> 13	
-				DIVISION OF OU GAS & MINING	
SIGNED A	he foregoing is true and correct	TITLE Operat	ions Manager	DATE11	8-84
(This space for Federa	d or State office use)				
APPROVED BYCONDITIONS OF APP	PROVAL, IF ANY:	TITLE		DATE	

### \*See Instructions on Reverse Side

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

Form 3160-6 (November 1983) (Formerly 9-329)

# MONTHLY REPORT OF OPERATIONS

Form approve	d - Budget Bureau N 004-0138 Expires August 31, 1985
Lease No	U-52169
Communitiza	ation Agreement No
	Utah High Plateau
Unit Name _	
<b>Participating</b>	Area
	Garfield State UT
Operator	Atlantic Richfield Co.

☐ Amended Report

(Forest Creek Divide Unit #1)

### (See Reverse of Form for Instructions)

This report is required by low (30 U.S.C. 189, 30 U.S.C. 359, 25 U.S.C. 396d), regulation (43 CFR 3162.4—3), and the terms of the lease. Failure to report can result in the assessment of liquidated damages, (43 CFR 3160), penalties, shutting down operations, or basis for recommendation to cancel the lease and forfeit the bond (43 CFR 3160).

Well No.	Sec. & 14 of 14	TWP	RNG	Well Status	Days Prod.	*Barreis of Oil	*MCF of Gas	*Barrels of Water	Remarks
1	NE NW Sec. 2	331s	2W	DRG	0	0	0	0	This well was spudded on Oct. 31, 1984.
. et	, ·				•		RECEIVE	· 🗗	Please see attach- ed drilling re- port.
so I						ŀ	IVISION OF C GAS & MINING	1	

\*If none, so state.

### DISPOSITION OF PRODUCTION (Lease, Participating Area, or Communitized Area basis)

	Oil & Condensate (BBLS)	Gas (MCF)	Water (BBLS)
*On hand, Start of Month	0	xxxxxxxxxxxxxxx	******
*Produced	0	0	0
*Sold	0	0	XXXXXXXXXXXXXXXX
*Spilled or Lost		XXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXX
*Flared or Vented	XXXXXXXXXXXXXXXX	0	XXXXXXXXXXXXXXX
*Used on Lease	0	0	XXXXXXXXXXXXXXXX
*Injected			
*Surface Pits	XXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXX	0
*Other (Identify)	0	0	0
*On hand, End of Month	0	XXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXX
*API Gravity/BTU Content	Him -	0	XXXXXXXXXXXXXXXX
Authorized Signature: D.A. S Title: Supervisor, Operations	Info Group	O. BOX 5540, De	enver,CO 80217

District	County or Parish	State
Rocky Mountain	Garfield	Utah
Field	Lease or Unit	
Utah High Plateau	Forest Creek Divide Unit	#1
10/26/84	Deve 1 Drid 22" hole to 78' GL. Set. cond & strt F	on: 3800')
10/27-29	Day -4. Cont RU. Set 16" cond @ 78' GL.	(16" @ 78' GL)
10/30/84	Day -5. Cont RU. Expect to spud 10/31/84.	(16" @ 78' GL)
10/31/84	Day -6. Mix mud. Cont RU. Expect to spud today.	(16" @ 78' GL)
11/1/84 174	Day-1 (82') - Drlg. (16" @ 9 MW: 8.7# Vis: 60 Pv/Yp: 10/47 Cont RU. Mix mud. PU DC. SPUD 2230 hrs 10/31/84. Drl	

general general medica mega sentre de la compacta de la decidad de la compacta de la compacta de la compacta d La compacta de

## ORAL WROVAL TO PLUG AND ABANDON WELL

file

perator_	ARC	0		Repr	esentativ	e Suzanne	2 <u>Barnes</u> 3-1077	<u>'</u>
lell No. <u>(</u>	Mit #	Divide   Locat	ion <u>\</u> a_	Se	ction 28	_Township_3	/S_Range2	2W
County G	arfiel	'L	Field			State	·	
Jnit Name Required D			,		Base of	fresh water :	sands	<del></del>
.D. 368	30'	Size hole Fill per	and sack		Mud Weigh and Top	t :	/g <b>al.</b>	<u> </u>
Casing Size	Set At	Top of Cement	To Be Pulled	From		Plugging Red To	quirements Sacks C	ement
103/4"	1185'			(i) 317	<u>o</u>	3370		
			(	2 105	0	1300		
Formation	Тор	Base	Shows_(	3 4		200		-
Volcanies	Surf.	1500'						
Varen.		·		-				-
Carnel	3030							
Navajo.	3375	<u> </u>			<del>_</del>	· ·		
<del></del>					•			
					<del></del>	:		
			<del></del>				<u> </u>	<del></del>
		•				<del></del>		<del></del>
	· *			REMARKS	•			
DST's, los	st circul	lation zon	es, water	zones,	etc.,			
			<u></u>					
						·		
		KOR			/			a.m.
Approved b	by	ムベン		Da	te $1/2$	<b>0</b> /84 Time	1400	p.m.
- A	popid	by A	ssad	Kaft	out.	<b>6</b> /84 Time	•	

ARCO Oil and Gas \_\_\_npany Rocky Mountain District 707 17th Street Mailing address: P.O. Box 5540 Denver, Colorado 80217 Telephone 303 293 4600



December 10, 1984

State of Utah
Department of Natural Resources
Division of Oil, Gas and Mining
4241 State Office Building
Salt Lake City, Utah 84114

Re: Monthly Report of Operations
Well No. Forest Creek Divide Unit #1
NE NW, Sec. 28-315-2W
Garfield Co., Utah

### Gentlemen:

Attached, in duplicate, is the Monthly Report of Operations for the month of October , 19 84, on the subject well.

This well was spudded on October 31, 1984.

Very truly yours,

B. R. Still

Supervisor, Operations Info. Group

BRS:af

Divide Unit #1 NE NW Section 28-31S-2W Garfield County, Utah



11/1/84 174	Day-1 (82') - Drlg. (16" @ 92' KB)  MW: 8.7# Vis: 60 Pv/Yp: 10/47  Cont RU. Mix mud. PU DC. SPUD 2230 hrs 10/31/84. Drld 14-3/4" hole to PD.
11/2/84 195	Day-2 (21') - Pmpg LCM. (16" @ 92' KB)  MW: NA Vis: 45-50 Pv/Yp: NA  Drld 14-3/4" hole to PD. Lost returns. Mix & pmpd LCM & attempt to regain  returns w/o success.
11/3-5/84 1185	Day-5 (990') - Rng 10-3/4" csg. (16" @ 92' KB)  MW: 9.2 Vis: 55 Pv/Yp: 17/18  Drld 14-3/4" hole to PD w/TFNB @ 639' & partial lost returns. POH. Rng 10-3/4" csg. Surveys: 1/4° @ 163', 1-1/4° @ 340', 1° @ 459', 620', 857' & 1160'.
11/6/84 1185	Day-6 (0') - NU BOPs. (10-3/4" @ 1185')  MW: NR Vis: NR Pv/Yp: NR  Ran 10-3/4", 40.5#, K-55, STC csg & Ind @ 1185'. Omt w/300 sx Howco lite + add foll'd by 500 sx "H" + add w/full returns & 30 bbls cmt to surf. WOC. Cut off csg & weld on wellhd. NU BOPs.
11/7/84 1185	Day-7 (0') - TIH w/magnet. (10-3/4" @ 1185')  MW: NR Vis: NR Pv/Yp: NR  Fin NU & press tst BOPE.
11/8/84 1345	Day-8 (160') - Drlg. (10-3/4" @ 1185')  MW: 8.9# Vis: 42 Pv/Yp: 10/16  RIH w/magnet. POH, rec'd jk. RIH w/B#3. DO cmt & shoe. Drld 9-7/8" hole t  PD. Rig dn time - 3-1/2 hrs.
11/9/84 2165	Day-9 (820') - Drlg. (10-3/4" @ 1185')  MW: 9.0# Vis: 43 Pv/Yp: 12/11  Drld 9-7/8" hole to PD. Survey: 1° @ 1610'.
11/10-13 32	Day-13 (1114') - Fishing. (10-3/4" @ 1185')  MW: 9.0# Vis: 43 Pv/Yp: 9/5  Drld 9-7/8" hole to PD w/TFNB @ 2618'. Twisted off between 8" & 6-3/4"  DCs. POH. PU fshg tools. RIH. Engage fsh w/OS. Surveys: 2° @ 2170', 1° (2360', 3/4° @ 2550', 1-1/4° @ 3016'.

Form approved. TIGHT HOLE Budget Bureau No. 1004-0135 UN ID STATES SUBMIT IN TRIP (Other instruction).
DEPARTMENT OF THE INTERIOR (or rece side) Form 3160-5 Expires August 31, 1985 (November 1983) 5. LEASE DESIGNATION AND SERIAL NO. (Lormerly 9-331) U-52169 BUREAU OF LAND MANAGEMENT 6. IF INDIAN, ALLOTTER OR TRIBE NAME SUNDRY NOTICES AND REPORTS ON WELLS (Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.

Use "APPLICATION FOR PERMIT—" for such proposals.) NA 7. UNIT AGRESMENT NAME OIL X Forest Creek Divide WELL OTER S. PARM OR LBASE WAMS 2. HAMB OF OPERATOR ARCO Oil and Gas Company, Division of Atlantic Richfield Company NA 9. WBLL NO. S. ADDRESS OF OPERATOR P.O. Box 5540, Denver, Colorado 80217

LOCATION OF WELL (Report location clearly and in accordance with any State requirements)

See also space 17 below.)

At surface Divide Unit #1 P.O. Box 5540, Denver, Colorado 80217 10. FIBLD AND POOL, OR WILDCAT Wildcat 11. SEC., T., R., M., OR BLE. AND SURVEY OR AREA 130' FNL & 2435' FWL NE/4 NW/4 28-31S-2W 12. COUNTY OR PARISE | 18. STATE 15. BLEVATIONS (Show whether DF, BT, CR, etc.) 14. PERMIT NO. Utah 7085' GL Garfield 43-017-30127 Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data 16. SURSEQUENT REPORT OF : NOTICE OF INTENTION TO: REPAIRING WELL WATER SHUT-OFF PULL OR ALTER CASING TEST WATER SEUT-OFF ALTERING CASING PRACTURE TREATMENT MULTIPLE COMPLETE FRACTURE TREAT **TBYNDORMERL.** x SHOOTING OR ACIDIZING SHOOT OF ACIDIZE CHANGE PLANS REPAIR WELL (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.) (Other) 17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and sones pertinent to this work.) \* Drilled ahead. Core #1 3385-3403. Core #2-jammed. Core #3 3428-3434. Core #6 3461-3465. Logged @ 3680. Core #4-jammed. Core #5 3441-3446. 3370-3170 Propose to P & A as follows: Plug #1 Plug #2 1300-1050 Plug #3 200-Surf Verbal approved received from: John Bazza - State Oil & Gas Commission 11-19-84 Assad Raffoul - State BLM office 11-19-84 DIVISION UF

OHL, GAS & MINING

I hereby certify that the foregoing is true and correct  SIGNED	TITLE .	Operations Manager	DATE	12-11-84
L.B. Morse (This space for Federal or State office use)				
	TITLE	ACCEPTED	DATE -	<del></del>
APPROVED BY	TITLE .	APPROVED BY T	HE STAT	
CONDITIONS OF ZITEOVERS = =		OF UTAH DIVIS	SION OF	
		OIL, GAS, AND	MINING	
		DATE: 64 12/19	81	
*50	te instruc	BY: None Side 12/19/	3	- Company

Form 3160-5 (November 1983)		TIGHT HOLE	TES	/Oshan	IN TRIP	TB•			1004-0135 1985
(Formerly 9–331)		MENT OF THE		CIOR verse sta	instruction) — n e)		-52169		
SIIN		TICES AND R			S		. IF INDIAN,	LLOTTES OR	TRIBS NAME
(Do not use this:	form for prop	cation for permit	epen or plug - for such	back to a different proposais.)	ent reservoir.	N	Ά		
ſ.						- 1	. UMIT AGREE		
WELL Y WELL	07222						orest Cr		ide
A. NAMB OF OPERATOR		District	- <b>6</b>	n	-13 0		. Farr de le A	ASE PARE	
ARCO Oil and Ga	is Compar	iy, Division o	or Atlan	tic Richti	eld Compa	DV.L	. WBLL BO.		
P.O. Box 5540,	Denver.	Colorado 802	17				ivide Ur		<del></del> -
4. LOCATION OF WELL (R. See also space 17 belo	eport location w.)	clearly and in accord	lance with an	y State requireme	ents.•	- 1	0. FIBLD AND	POOL, OR WI	LDCAT
At surface	TENT S. C	2435' FWL NE	/4 NW/4	CONFIDENCE.			1. SBC., T., B.,	M., 02 BLK.	AMD
130	FNL OF 2	PACE NE	/4 NW/4	W.		J	SURVEY	OR ARBA	
-					Z4,		8-31S-2V	·	
14. PERMIT NO.		15. BLEVATIONS (S		DF, RT, CRL, etc.)	4	"	arfield		Utah
43-017-30127 16.	<i></i>		5' GL	N	· D				
		Appropriate Box T	o Indicate I	Mature of Mot	, , ,		er Dara r Beroez of:		
	OTICE OF INT		[						
TEST WATER SHUT-OF	" —	PULL OR ALTER CASI MULTIPLE COMPLETE			SEUT-OFF LE TREATMENT			AIRING WELL Bring Casin	
SHOOT OR ACIDIES		ABANDON*		\$E00711	NG OR ACIDIZING		ABA	NDONMBHT*	x
REPAIR WELL		CHANGE PLANS		(Other)	ors: Report re	suits of	multiple com	pletion on T	
17. DESCRIBE PROPOSED OR proposed work. If	COMPLETED O	PERATIONS (Clearly st	ate all pertine		mpletion or Rec	ompletic	on Report and	Log form.)	
Finished		PLUGGED AND							- <b> </b>
	Plug #1	3370'-3170'							
	Plug #2	1300'-1050' 200'-Surfa				agged	lplug		
1	Plug #3	200 -Surra	ce 95 8x	CIASS A	Cement				
Strip cel	lar and	clean tanks.			•				
Released	rig 11-2	1-84.			er and	: 341	, m		
Cedar Cit	y BLM re	presentative	on locat	ion.	ji di	ال	all W	FIN	
					فسينة لاست	DEC	1 3 1984		
							JN Ur		
					OIL, (	BAS 8	& MININ	G	
18. I hereby certify that	the foregoing	is true and correct	<del></del>				····	<del> </del>	
SIGNED L.B. M	orse	- /kl	TITLE	Operations	Manager		DATE _	12-11-	84
(This space for Feder	ral or State o	Mce use)		n.	( incore)				
APPROVED BY			TITLE	MCC	OWED P	<del>/ TH</del>	E STAT	E	·v
CONDITIONS OF AF	PROVAL, IF	ANY:		OF	UTAH D			<del>_</del>	
					GAS A		_		

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Divide Unit #1 NE NW Section 28-31S-2W Garfield County, Utah



### PLUGGED AND ABANDONED AS FOLLOWS:

Plug	#1	3370'	-	3170'	112	sx	Class	"A"	cement
Plug	#2	1300'	-	1050'	119	sx	Class	"A"	cement
Plug	#3	200'	_	Surface	95	sx	Class	"A"	cement

Field		Lease or Unit	Well no
<u> </u>	ateau	Forest Creek Divide I	· <u>  +1                                  </u>
Auth. or W.Q. no.		Exploratory	API #43-017-30127
11/1/84 174	Day-1 (82') - MW: 8.7# V Cont RU. Mix mu	Drlg.	(16" @ 92' KB)  //31/84. Drld 14-3/4" hole to PD.
11/2/84 195	10.1. MA 1	Pmpg LCM. Vis: 45-50 Pv/Yp: NA ole to PD. Lost returns. Mi occess.	(16" @ 92' KB) x & pmpd LCM & attempt to regain
11/3-5/84 1185	MW: 9.2	- Rng 10-3/4" csg. Vis: 55 Pv/Yp: 17/18 ole to PD w/TFNB @ 639' & p urveys: 1/4° @ 163', 1-1/4°	(16" @ 92' KB)  Partial lost returns. POH. Rng  2 @ 340', 1° @ 459', 620', 857' &
11/6/84 1185	Ran 10-3/4", 4 add foll'd by	Vis: NR Pv/Yp: NR 0.5# K-55, STC csg & lnd (	(10-3/4" @ 1185') @ 1185'. Omt w/300 sx Howco lite turns & 30 bbls cmt to surf. WOC.
11/7/84 1185	Day-7 (0') - MW: NR Fin NU & press	TIH w/magnet. Vis: NR Pv/Yp: NR s tst BOPE.	(10-3/4" @ 1185')
11/8/84 1345	RIH w/magnet.	176 a. 42 Dy/Vn. 10/16	(10-3/4" @ 1185')  DO cmt & shoe. Drld 9-7/8" hole
11/9/84 2165	Day-9 (820') - MW: 9.0# V		(10-3/4" @ 1185') '.
11/10-13 3279	Drld 9-7/8" hold DCs. POH. PU fs	is: 43	(10-3/4" @ 1185') isted off between 8" & 6-3/4" w/OS. Surveys: 2° @ 2170', 1° @
11/14/84 3370		7is: 42	(10-3/4" @ 1185') O' to btm, 10-15' of fill. Drld
11/15/84 3403	Drld 9-7/8" hole	s: 52 Pv/Yp: 16/14	10-3/4" @ 1185')  i. Cut Core #1 3385-3403'. POH.  vey: 3-3/4° @ 3356'.

		County or Parish		State
istrict		Garfield	,	Utah
Rocky Mountain	·	Lease or Unit		Well no.
ield		Forest Creek Divide	Unit _	#1
Utah High Plat	eau	while drilling or workover in progress		
Date and depth so f 8:00 a.m.	implete record for each day w			
	and the second of the second			
11/16/84 3437	RIH w/CB. Cut rec'd 21-1/2' jammed. POH.	- Drlg. Vis: 48 Pv/Yp: 18/12 Core #2, 3403-3428', bbl RIH w/CB. Cut Core #3, 3 LD core & CB. Cut 6', rec' obtained 50% returns. FIH o PD w/full returns.	3 5 1 DTW +0 28	core. Cut 25', returns & CB
11/17-19 3680	Jammed. POH. POH. LD CB, r	) - Logging.  Vis: 58 Pv/Yp: 21/17  pole to 3439'. POH. RIH w/CB. ( Rec'd 2' core. RIH w/CB. ( Rec'd 4-1/2' core. RIH w/bi 3461-65' & bbl jammed. POH  to PD. Sht trip. Circ. POH	CB. Cut Core #4, Cut Core #5, 344 it & drld to 346 H. ID CB. Rec'd	, 3439-3441'. 11-46' & bbl jammed. 51'. POH. RIH w/CB. 4'. RIH w/bit. Drld
11/20/84 3680	Day-20 (0') MW: NR Ran logs: DI w/OE DP. Pre	) - RIH w/OE DP. Vis: NR Pv/Yp: NR LL/MSFL, FDC/CNL/GR, VHCS, ep to plug.	(10-3/4" @ VSP survey. RD	
		,		
11/21/84 3680	(10-3/4" 6 ]	- FINAL REPORT - WELL P & 1185') . Set a balanced plug 3370 "A", 200-surf w/95 sx Cl	01701/112 ev	Cl "A", 1300-1050' s 11/21/84. Prep to

Divide Unit #1 NE NW Section 28-31S-2W Garfield County, Utah

CONFIDENTIAL

11/14/84 3370

Day-14 (91') - Drlg.

(10-3/4" @ 1185')

MW: 9.0#

Vis: 42

Pv/Yp: 12/8 POH. LD fsh. Inspect BHA. RIH. Wsh & rm 80' to btm, 10-15' of fill. Drld

9-7/8" hole to PD.

11/15/84 3403

Day-15 (33') - RIH w/CB.

(10-3/4" @ 1185')

Vis: 52 Pv/Yp: 16/14

Drld 9-7/8" hole to 3385'. POH. PU CB & RIH. Cut Core #1 3385-3403'. POH.

LD core. Cut 18', rec'd 15'. RIH w/CB. Survey: 3-3/4° @ 3356'.

11/16/84 3437

Day-16 (34') - Drlg.

(10-3/4" @ 1185')

Pv/Yp: 18/12 MW: 9.1# Vis: 48

RIH w/CB. Out Core #2, 3403-3428', bbl jammed. POH. LD core. Out 25',

rec'd 21-1/2'. RIH w/CB. Cut Core #3, 3428-3434'. Lost returns & CB jammed. POH. LD core & CB. Cut 6', rec'd 5'. RIH to 2800'. Pmp mud w/LOM.

Hole filled & obtained 50% returns. FIH. Took 50 bbls to fill hole. Drld

9-7/8" hole to PD w/full returns.

11/17-19 3680

Day-19 (243') - Logging.

(10-3/4" @ 1185')

Pv/Yp: 21/17 MW: 8.9# Vis: 58

Drld 9-7/8" hole to 3439'. POH. RIH w/CB. Cut Core #4, 3439-3441'.

Jammed. POH. Rec'd 2' core. RIH w/CB. Cut Core #5, 3441-46' & bbl jammed. POH. LD CB, rec'd 4-1/2' core. RIH w/bit & drld to 3461'. POH. RIH w/CB. Cut Core #6, 3461-65' & bbl jammed. POH, LD CB. Rec'd 4'. RIH w/bit. Drld

9-7/8" hole to PD. Sht trip. Circ. POH. RU Schl & strt logging.

11/20/84 3680

Day-20 (0') - RIH w/OE DP.

(10-3/4" @ 1185')

Vis: NR Pv/Yp: NR

Ran logs: DLL/MSFL, FDC/CNL/GR, VHCS, VSP survey. RD Schl. LD DCs. RIH

w/OE DP. Prep to plug.

11/21/84 3680

Day-21 TD - FINAL REPORT - WELL P & A. 11/21/84.

(10-3/4" @ 1185')

RIH w/-E DP. Set a balanced plug 3370-3170' w/112 sx Cl "A", 1300-1050' w/119 sx CL "A", 200-surf w/95 sx C1 "A". RR 0600 hrs 11/21/84. Prep to

set DHM.

Form 3160-4 (November 1983) (formerly 9-330)

## UNITED STATES

SUBMIT IN DUPLICE.

(See other in-

Form approved.
Budget Bureau No. 1004-0137
Expires August 31, 1985

5. LEASE DESIGNATION AND SERIAL NO.

	_						_				
DEPART	V	E	1	11	•	OF		THE	IN	TER	IOF
51155			_	~		ANIF	٠.	MANIAC	CME	NT	

(See other instructions on reverse side)

	601	KEAU	OF LAN	יט אירוזי	CLML					0=321		
WELL COM	MPLETION	OR	RECO	MPLETI	ON R	EPORT	AN	D LOG	; * 	6. IF IND	IAN, ALL	OTTEE OR TRIBE NAME
1a. TYPE OF WELL	L: OIL WEI	. 🗆	GAS WELL	DE	XX v	Other		- 4	ON.	7. UNIT A		
b. TYPE OF COMP	LETION:		PITG BACK			Clark Alleganors			A.	Agres	t Cre	eek Divide
WELL CA	OVER L. EN		BACK L	RESV	R. L. ja			TATAL	THE	ENA.	€	
ARCO Oil an	d Gas Comp	any,	Divis	ion of	Atlan	the Pie	n -	nd doff	pany	Divid		+ #1
3. ADDRESS OF OPER				0001	7				ALCONO.	1 C #		OL. OR WILDCAT
P.O. Box 55						01	- C _	. 3 1984	16	Wilde		OL, OR WILDOW
4. LOCATION OF WEL. At surface	L (Report location 130' FNL					•		)N UF	•	ŀ	T., R., M.,	, OR BLOCK AND BURVEY
At top prod. inte	rval reported be	low							NO			
at top prod						OHL, G/		WILLIAL X	NG	28-31	S-2W	
At total depth						17-3012						
					RMIT NO.	1		ISSUED		12. COUNT	Ħ	13. STATE
				BL				) <del>-18-84</del>		Garfi		Utah
15. DATE SPUDDED	16. DATE T.D. R		1			1				RT, GB, ETC.	• 19.	ELEV. CASINGHEAD
11-1-84	11-19-8		1	11-21			095		12'K		l	7095'
20. TOTAL DEPTH. MD 4			T.D., MD 4	TVD 22	HOW MA	TIPLE COMPL	••	23. INTE	RVALS LED BY	ROTARY		CABLE TOOLS
3680 <b>'</b>		face				P&A			<u>→                                    </u>	0-36		
24. PRODUCING INTER	VAL(S), OF THIS	COMPLE	TION—TOP	BOTTOM,	NAME (M	D AND TVD)	•					25. WAS DIRECTIONAL SURVEY MADE
	PLUGGED	AND A	ABANDO	NED								NO
26. TYPE ELECTRIC A											27.	WAS WELL CORNE
	OLL/MSFI	<u> </u>	RDC/CN	L/GR (	RHC						<del>  (</del>	YES
28.		1	CAS	ING RECO	RD (Rep	ort all string	s set i					
CASING SIZE	WEIGHT, LB.	FT.	DEPTH SE		İ	E SIZE	_[		ENTING	RECORD		AMOUNT PULLED
16"			92	'KB	<del> </del>	Con	duct	or				_
10-3/4"	40.5		1185	'KB	14	-3/4"	-	800	) sx			NONE
	-	-					-					
29.		LINER	RECORD					30.		TUBING R	ECORD	
8128	TOP (MD)	BOTTO	M (MD)	SACKS CI	EMENT*	SCREEN ()	(D)	SIZE		DEPTH SET	(MD)	PACKER SET (MD)
	Р	& A								P 8	. А	
31. PERFORATION REC	opp (Internal a	ze and	number			32.	A.C	TO SHOT	FRACT	TURE CEM	ENT SC	UEEZE, ETC.
31. PERFORATION NEC	CED (Inter Cos, Co		,					L (MD)				MATERIAL USED
						-		- (/	<del>-</del>			
	P&A								-P&A			
	WA								1 021			
				·	DROI	OUCTION			1			
33.º DATE FIRST PRODUCT	ION I DECO	CTION	METHOD (	Floreina, a		umping—eize	and t	wae of pur	RD)	W	ELL STAT	IUS (Producing or
						NDONED					shut-in)	<u></u>
DATE OF TEST	HOURS TESTED	CH	CHOKE SIZE PROD'N. FOR OIL—BBL. GAS—MCF. WATER—SBL.  ———PLUGGED AND ABANDONED——————————————————————————————————							-BBL.	GAS-OIL BATIO	
			PLUG	GED AN	Ď ABAI	DONED		<del></del>				
FLOW. TUBING PROCE.	CASING PRESSU	RE CA	LCULATED	011/	881	GAS-	-MCF.		WATER	HBL.	OIL	GRAVITY-API (CORR.)
	<b></b> _		-HOUR AA	GED AN	D ABAI	NDONED		<u>-</u> -				
34. DISPOSITION OF G	AB (Sold, used fo					1				TEST WI	TNESSED	BT
										+		
35. LIST OF ATTACH	uents 1 History		<del></del>								2.	5082
36. I hereby certify		00 604	attached	Informatio	n is come	lete and cor	rect .	s determin	ed from	all availa		
ou. I hereby certify	DE IN A	in the second										
SIGNED	10 101 de	10/	bu	Т	TLE _	Operatio	ons i	Manage	<u>r</u>	[	ATE	12-11-84
T	. R Morse		12									

FORMATION	404	POTTOM	DESCRIPTION, CONTENTS, ETC.		TOP	Ь
1# 4.70				NAKE	MEAS, DEPTH	TRUE VERT. DEPTH
	3385	3403	Cut 18', recovered 15' - 3' sand, slt st, sh			
Core #2	3403	3428	Jammed	Volcanics	Surface	
Core #3	3428	3434	Jammed	Claron	1500'	
Core #4	3439	3441	Jammes	Carmel	3030	·
Core #5	3441	3446	Jammed	Navajo	3375'	
Core #6	3461	3465	Jammed			

	mmunitizatio	52169	No	
	eld Name	Utah		<u> </u>
Pa	rticipating Are	ea		
Co	ounty	Garfi	eld Stat	e <u>UT</u>
				Richfield Co.
	Amended Re	ort	(Forest Cre	eek Divide Unit
ınd	production (inc	luding status o	f all unplugged	wells) for the mont
vers	e of Form for In	structions)		
.C. 35	50 25 H.S.C. 39	6d), regulation ( , (43 CFR 3160),	43 CFR 3162.4—3), penalties, shuttir	and the terms of the ng down operations, or
	*Barrels	·MCF of	*Barrels of Water	Remarks

## The following is a correct report of operations of November 19 84 (See Re

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

Form 3160-6 (November 1983) (Formerly 9-329)

MONTHLY REPORT OF **OPERATIONS** 

This report is required by law (30 U.S.C. 189, 30 U.S lease. Failure to report can result in the assessment basis for recommendation to cancel the lease and forfe

Well No.	Sec. &	TWP	RNG	Weil Status	Days Prod	*Barrels of Oil	*MCF of Gas	*Barrels of Water	Remarks
1	NE NW Sec. 28	31S	2W	P&A	0	0	0	0	This well was spudded on Oct. 31, 1984.
									Please see attaced drilling report.
									Final report. Well P&A on 11/21/84.
								(A)	CEIVEN
								D COL	EC 1 4 1984

\*if none, so state.

DISPOSITION OF PRODUCTION (Lease, Participating Area, or Communitized Area basis) GAS & MINING

,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
		Oil & Condensate (BBLS)	Gas (MCF)	Water (BBLS)
*On hand, Start of Month		0	*****	XXXXXXXXXXXXXXXX
*Produced		0		0
*Sold		0	0	XXXXXXXXXXXXXXXX
*Spilled or Lost		0	<u> </u>	XXXXXXXXXXXXXXXX
*Flared or Vented		XXXXXXXXXXXXXXX	0	XXXXXXXXXXXXXXX
*Used on Lease		0	0	******
*Injected				0
*Surface Pits		XXXXXXXXXXXXXXX	XXXXXXXXXXXXXXX	0
*Other (Identify)		0	0	0
*On hand, End of Month		0	XXXXXXXXXXXXXXXX	XXXXXXXXXXXXXX
*API Gravity/BTU Content	Do Olin		0	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
Authorized Signature:	ations Info.		O. Box 5540, De	enver, co 60217
Title: Supervisor, Oper	actons into.	GLOUP	Page of	

Form 3160-5 (November 1983) (Formerly 9-331)		TICHT HOLE UN ED STATE IMENT OF THE AU OF LAND MANA	INTERIO	1000 1-00	TB*	Form approved. Budget Bureau N Expires August  5. LEASE DESIGNATION ( U-52159	31, 1985 AND SERIAL NO.	
SUNI (Do not use this i	DRY NO	TICES AND REP	ORTS ON or plug back	N WELLS to a different recervoir.		6. IP INDIAN, ALLOTTER NA	OR TRIBE NAME	
1.						7. UNIT AGREEMENT NA		
·	7 07558	X			ł	Forest Creek	Divide	
2. HAMB OF OPERATOR			·Co	Richfield Compa		8. FARM OR LEASE HAM	8	
ARCO 011 and G	as Compa	ny, Division of	Atlanta	Richfield Compa	any	NA		
3. ADDRESS OF OPERATOR	<u> </u>			Q.		9. WELL NO.	·	
						Divide Unit #		
4. LOCATION OF WELL (B	port location	clearly and in accordance	with any St	ate required this.		10. PIBLD AND POOL, OR	WILDCAT	
See also space 17 belo At surface		2/251 TRIT NE//	A NOTE OF A			Wildcat		
130	. FNL &	2435' FWL NE/4	+ NW/4			11. SEC., T., R., M., OR B. SURVEY OR AREA	LE. AND	
					- 1	28-31S-2W		
						12. COUPTY OR PARISE	12 67472	
14. PERMIT NO.		15. BLEVATIONS (Show		r, GR, etc.)	}	Garfield	Utah	
43-017-301	27		095 GL			Galifeid	Ocali	
16.		k Appropriate Box To Indicate Nature of Notice, Report, or				Other Data		
,	OTICE OF INT	BRIUN TO.	_	<del></del> -		}		
TEST WATER SHUT-OF	r#	PULL OR ALTER CASING		WATER SHUT-OFF	-	REPAIRING W	<del></del>	
PRACTURE TREAT		MULTIPLE COMPLETE	]	PRACTURE TREATMENT		ALTBRING CA	<del></del>	
SHOOT OR ACIDIZE		ABANDON*		SECOTING OR ACIDISING		R CONFIDENTIAL	<b>  </b>	
REPAIR WELL		CHANGE PLANS		(Nors · Report re	aults	of multiple completion of tion Report and Log for	on Well	
(Other)  17. DESCRIBE PROPOSED OR proposed work. If nent to this work.)	well to dire	OPERATIONE (Clearly state ctionally drilled, give subs	all pertinent (surface loostive	details, and give pertinent on and measured and true v	la tan	including actions ted date	of starting and	
		sion is hereby : ENTIAL status.	requested	1/to hold this we	11 :	in a		
				DEC 20	[] \[ \] 198			
				Dillion	سريد (			
				OIL, GAS & N	Ur			
				O.C., GAS & 1	VIN.	ING		
						<del></del>		
40 7 1	Aba 4	a la true and accept						
18. I hereby certify that	the toregon		One	rations Manager		12=	14-84	

## \*See Instructions on Reverse Side

TITLE .

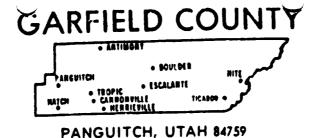
(This space for Federal or State office use)

Operations Manager

DATE

DATE .

COUNTY COMMISSION
George Middleton, Chairman
Guy W. Thompson
H. Dell LeFevre
Dawna Barney, Clerk



Tom Simkins, Assessor
Patrick B. Nolan, Attorney
Mamie D. Hatch, Recorder
Merie Stowell, Treasurer
Vic Middleton, Sheriff
John W. Yardley, Justice of the Peace

December 26, 1984

Ross Construction Box 397 Vernal. Utah 84078

Dear Sir:

Garfield County will be responsible for removal of the culvert at Antimony, approximately 100 feet below the canel diversion.

Respectfully,

Ron Greenhalgh

Garfield County Road Department

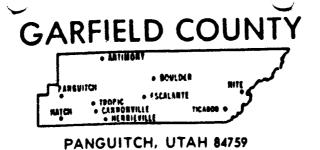
To whom it may concern:

I authorize Garfield County to remove the culvert at the Canal diversion in Antimony, Utah.

Verge Brown

Otter Creek Irrigation Co.

COUNTY COMMISSION
George Middleton, Chairman
Lib/ W. Thompson
H. Dell LeFevre
Dawna Barney, Clerk



Tom Simkins, Assessor
Patrick B. Nolan, Attorney
Mamie D. Hatch, Recorder
Merie Stowell, Treasurer
Vic Middleton, Sheriff
John W. Yardley, Justice of the Peace

December 26, 1984

Verge Brown Otter Creek Irrigation Company Annabella, Utah

Dear Sir:

Garfield County agrees to remove the culvert at the diversion at Antimony, before high water run off. April 1, 1985

Please sign the statement enclosed for my records.

Respectfully,

Ron Greenhalgh

Garfield County Road Department

ARCO Oil and Gas (\*)mpany
Rocky Mountain District
707 17th Street
Mailing address: P.O. Box 5540
Denver, Colorado 80217
Telephone 303 293 4600



January 7, 1985

Mr. Virge Brown Otter Creek Reservoir Company P.O. Box 15 Annabella, Utah 84711

RE: Release of Responsibility - Culvert Removal Forest Creek Divide Unit #1 Well Garfield County, Utah

Dear Mr. Brown:

Upon concurrence by both parties, this letter will serve to make null & void the agreement dated 10/5/84 reached between ARCO Oil and Gas Company and Otter Creek Reservoir Company, a copy of which is attached. Specifically, ARCO will be freed from any responsibility regarding the installation or removal of the culvert which was installed within the subject wells access road.

As per the attached agreements reached between Otter Creek Reservoir Company and Garfield County, the responsibilities concerning this culvert will be transferred from ARCO Oil and Gas Company to Garfield County.

If you concur with this agreement, please sign below. If you have any questions regarding this matter, please call me at (303) 293-1077.

Sincerely,

Suzame M. Barnes Teo Drilling Engineer WWP

SMB/tkj

Attachment

CONCUR:

CONCUR:

President

Otter Creek Reservoir Company

District Drilling Superintendent AROO Oil and Gas Company

cc: J. E. Onisko

K. U. Park

J. M. McCarthy

M. T. Webster

Well office as Company is a Division of Atlantic Richfield Company

_	xploration Company il and Gas Company <b>∜</b>	Record Of Shipme, t Of Confidential Information
/ /	Hah-natural Resources	P.D.Bx 5540
3 Irad	e Center, Shite 350	P.O.BX 5540
SLC, L	LT 84180-1203	Denver, Co 80217
Enclosed	☐ Under separate cover ☐ Via	·
Subject	Completion Data	
	+age	p number & description
Quantity	<u> </u>	p number & description
4 3	#1 Forest Creek Dive	de
	Dual Faterlog-MSFL;	(1) Burehole Compensated Some;
(1	Litho Density Compen	(1) Berekole Compensated Sonic; nated Peutron; (1) Core analysis Kepart
10 +	t Deep Prail	
	Dual at a logi-mst-Qa	mma Ray-SP; (1) Berehole ) Compensated Neutron Litho- ill Slem Jest Reports; (1) Core
	Annual At of Social Ville	Amount of the
	imperiorea some, a	· · · · · · · · · · · · · · · · · · ·
4	Jensity-Gamma; (2) Ur	ell dem Sex Reports, a) are
	enalysis legart.	
4	# 1 Rocky Ford	
(1	<u> </u>	(1) Borehole Compensated Sorie:
	Little De din 7 Complete	(1) Borehole Compensated Sovic; sated; (1) Core analysis
	D OF THE DESIGNATION OF THE PARTY OF THE PAR	sacres of the constraints
	KIXI	
	l.	and carry of this transmitted
Signed by	y and acknowledge receipt, by signing and returning the se	Date 7/ (100
Received by	Huyes jo XXXXX	RECEIVED 3/18/85
Remarks		196J
		DIVISION OF OIL
		eas & Mining

AR3B-1370-F

## Core Services, Inc.®

December 13, 1984

ARCO Exploration Company P.O. Box 5540 Denver, Colorado 80217

Attention: Mr. Jim Perkins

Subject: Core Analysis Data; Forest Creek Divide No. 1 Well; Garfield

County, Utah; TTCS File No. 85107

#### Gentlemen:

Diamond coring equipment and water base mud were used to obtain 4.0-inch diameter cores from the formations and intervals shown on the preceding page in the subject well. A representative of Terra Tek Core Services received the cores at the well-site where they were preserved in plastic polytubing and transported to our Salt Lake City laboratory for routine plug analysis.

A core gamma log was recorded and, along with porosity, permeability, grain density and fluid saturation plots, is shown on the enclosed Teklog.

Residual fluid removal was accomplished by the Dean-Stark low temperature solvent extraction method on one-inch diameter plug samples drilled from the cores. Porosities were determined by Boyle's law (helium) grain volumes and Archimedes (mercury) bulk volumes. Horizontal permeabilities to nitrogen were measured on these same plugs in a hassler sleeve using an orifice manometer and traveling meniscus to monitor downstream flow.

Data resulting from the above analysis is tabulated on pages one through three followed by a summary reflecting average data by zones based on permeability, porosity and fluid saturation variations.

The cores are being shipped to the ARCO core storage facility on East 51st Street in Denver.

We sincerely appreciate this opportunity to be of service.

Jack R. Good

Laboratory Director

JRG/cy

 <sup>360</sup> Wakara Way
 Salt Lake City, Utah 84108
 (801) 584-2480

<sup>• 920</sup> Central Avenue • Suite #2 • Billings, Montana 59102 • (406) 256-0371

 <sup>1625</sup> Broadway
 Suite 2110
 Denver, Colorado 80220
 (303) 595-0263

# Core Services, Inc.®

**TerroTek** 

ARCO Exploration Company
Forest Creek Divide Well No. 1
Garfield County, Utah

TTCS File No. 85107

Core No.	Interval	<u>Formation</u>
1	3385.0 - 3403.0	Navajo
2	3403.0 - 3428.0	Navajo
3	3428.0 - 3434.0	Navajo
	3434.0 - 3439.5	Drilled Interval
4	3439.5 - 3441.0	Navajo
5	3441.0 - 3446.0	Navajo
	3446.0 - 3461.0	Drilled Interval
6	3461.0 - 3465.0	Navajo

### RECEIVED

MAR 2 0 1985

DIVISION OF OIL GAS & MINING

<sup>• 360</sup> Wakara Way • Salt Lake City, Utah 84108 • (801) 584-2480

<sup>• 920</sup> Central Avenue • Suite #2 • Billings, Montana 59102 • (406) 256-0371

<sup>• 1625</sup> Broadway • Suite 2110 • Denver, Colorado 80220 • (303) 595-0263

University Research Park - 360 Wakara Way - Salt Lake City, Utah 84108 - (801) 584-2480 - TWX 910-925-5284

APCO .	EYPI	DRATTON	COMPANY

Well:

Forest Creek Divide #1

Field:

Drilling Fluid:

State:

Counts:

Location:

03 Dec 1984

85107

)ample Number	Derth (feet)	Permeability Horz (md)	Porosity (%)	Saturation Oil H2O (%) (%)	Grain Density (dm/cc)	Lithology	
	COLUMN CO				-		• •
1	3385.0-86.0	0.20	20.1	0.0 87.2	2.80		
2	3386.0-87.0	2.6	16.5	0.0 99.3	2.75		
3	3387.0-88.0	0.83	19.0	0.0 91.9	2.74		mage 1/8
· 4	3388.0-89.0	0.01	9.1	0.0 99.3	2.74		and the second s
5	3389.0-90.0	0.04	15.3	0.0 96.4	2.77		
							BECEIVED
	3390.0 - 3395.0					Shisltyicalc	
6	3395.0-96.0	6.2	26.2	• 0.0 . 96.2	2.76		1100 A A 100E
7	3396.0-97.0	10	25.3	0.0 86.1	2.81		MAR 2 0 1985
8	3397.0-98.0	0.24	16.9	0.0 77.2	2.85		
9	3398.0-99.0	0.46	15.5	0.0 92.0	2.81		DIVISION OF OIL
					*! 		GAS & MINING
μo	3399.0-00.0	<0.01	11.5	0.0 86.3	2.79		
1	3400.0 - 3103.0					Not Recovered	
11	3403.0-04.0	0.15	17.3	0.0 76.5	2.86		
12	3404.0-05.0	0.03	10.3	0.0 85.7	2.86		
13	3405.0-06.0	0.01	17.0	0.0 77.3	2.89		CECT OCIC
					14. 14.		GEOLOGIC
14	3406.0-07.0	0.01	14.6	0.0 79.6	2.86		WALLET THE TOTAL
15	3407.0-08.0	0.02	16.3	0.0 75.9	2.88		WELL FILE
16	3408.0-09.0	0.02	17.1	0.0 84.6	2.85		
	3409.0 - 3417.0					Shislty	
17	3417.0-18.0	0.30	15.3	0.0 56.6	2.78		

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ARCO EXPLORATION COMPANY

Well: Forest Creek Divide #1

Date: 03 Dec 1984

TTCS File #: 85107

WW

			· · · · · · · · · · · · · · · · · · ·				
Sample	Derth	Permeability Horz	Porosity	0i1	ation H20	Grain Density	Lithology
Number	(feet)	(md)	(%)	(%)	(%)	(sm/cc)	
7	-						
18	3418.0-19.0	0.07	12.0	0.0	86.2	2.65	
19	3419.0-20.0	0.15	12.9	0.0	80.4	2.65	
20	3420.0-21.0	0.06	10.3	0.0	85.7	2.65	
21	3421.0-22.0	2.3	12.2	0.0	78.8	2.65	
22	3422.0-23.0	3.9	12.0	0.0	81.6	2.64	
23	3423.0-24.0	5 • 1	13.4	0.0	81.7	2.64	
24	3424.0-25.0	3.6	16.2	0.0	79+1	2.71	
- '	3425.0 - 3126.0					· North	Not Recovered
25	3428.0-29.0	2.0	12.0	0.0	81.5	2.66	
26	3429.0-30.0	2.5	11.4	0.0	71.4	2.69	
•					7.0	4,	
27	3430.0-31.0	1.9	9.5	0.0	81.6	2.65	
28	3431.0-32.0	2.0	10.0	0.0	87.3	2.65	
29	3432.0-33.0	2.3	11.4	0.0	80.9	2.67	
)30	3433.0-34.0	4.9	12.0	0.0	75.3	2.66	
	3434.0 - 39.5						Brilled Interval
31	39.5-10.0	5.9	10.9	0.0	59.4	2.65	
32	3440.0-41.0	10	12.3	0.0	60.2	2.66	
33	3441.0-42.0	9.8	12.3	0.0	60.0	2.65	
34	3442.0-43.0	11	11.2	0.0	61.9	2.64	GEOLOGIC
35	3443.0-44.0	6.1	12.3	0.0	57.9	2.66	
*							WELL FILE
36	3444.0-45.0	9.6	12.7	0.0	76.2	2.68	AA WATTER YE YERRY
37	3445.0-46.0	6.4	10.9	0.0	84.4	2.67	

Page 2

Page 3

University Research Park - 360 Wakara Way - Salt Lake City, Utah 84108 - (801) 584-2480 - TWX 910-925-5284

ARCO EXPLORATION COMPANY

Date: 03 Dec 1984

TTCS File #: 85107

Well:

Forest Creek Divide #1

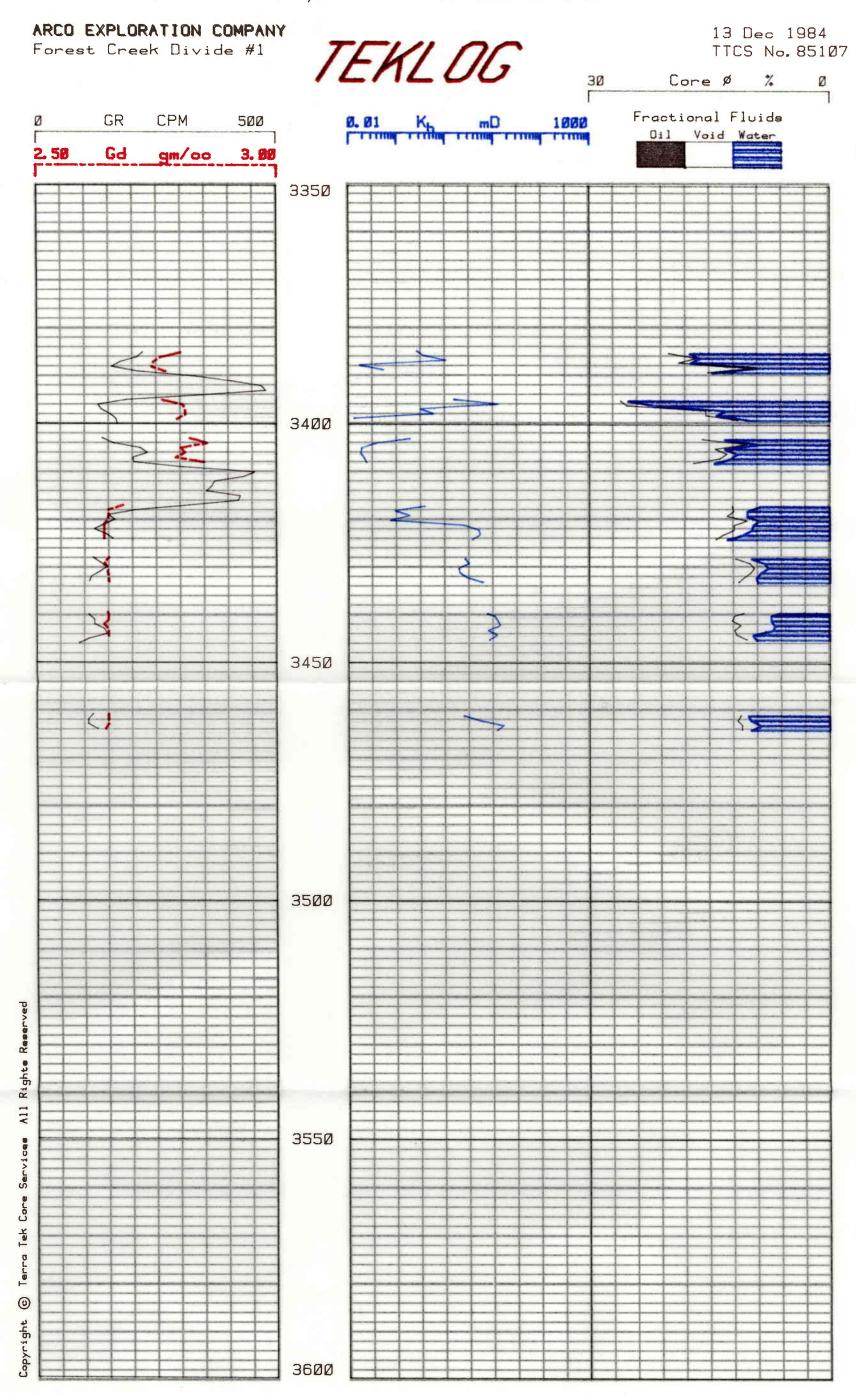
uu

Sample Number	De⊳th (feet)	Permeability Horz (md)	Parosity (%)	Satur Oil (%)	H20 (%)	Grain Densits (≤m/cc)	Lithology
<u> </u>							
· .	3446.0 - 3461.0						Brilled Interval
38	3461.0-62.0	1.9	11.7	0.0	87.8	2+67	
39	3462.0-63.0	4.2	12.2	0.0	80.9	2.67	
40	3463.0-64.0	13	11.1	0.0	77.7	2.66	
41	3464.0-65.0	9.5	11.1	0.0	89.4	2.64	



### TERRA TEK CORE SERVICES INC.

360 Wakara Way. SLC Utah 84108 (801) 584-2480





University Research Park - 360 Wakara Way - Salt Lake City, Utah 84108 - (801) 584-2480 - TWX 910-925-5284

### ARCO EXPLORATION COMPANY

Well: Field: Forest Creek Divide #1

Wildest

Drilling Fluid: Water Base

State: Counts:

Location:

Utah

Garfield

Sec. 28-T31S-R2W

13 Dec 1984 Date:

TTCS File #: 85107

Elevation:

### PLUG DEAN-STARK ANALYSIS

		Permeability	Porosity	Satur	ation	Grain	Lithology	(
Sample	Derth	Horz		Oil	H20	Densits		•
Number — —	(feet)	(md)	(%)	(Z) 	(%)	(sm/cc) 		
OLAVAN	FORMATION							
1	3385.0-86.0	0.20	20.1	0.0	87.2	2.80	Dol,suc,sds,sts	
2	3384.0-87.0	0.29	16.7	0.0	97.6	2.76	pol:suc:sda:jwa	
3	3387.0-88.0	0.83	19.0	0.0	91.9	2.74	Dol:enc:eqs:lwa	
4	3388.0-89.0	0.01	9.2	0.0	97.8	2.74	Ls:fxl:sdg:sl/pgr	
5	3389.0-90.0	0.04	15.3	0.0	96.4	2.77	Dol,suc,sds,lms	
3:	390.0 - 3395.0						Shisltyicalo	
6	3395.0-96.0	1.2	26.2	0.0	96.2	2.76	Dol;ool;sl/lms;pr vss	
7	3396.0-97.0	10	25.3	0.0	86.1	2.81	Dolinolis1/lmsipp vssifis	. 1
8	3397.0-98.0	0.24	15.5	0.0	84.0	2.81	Dol;ool;sl/lms;pp vds	(
9	3398.0-99.0	0 + 46	15.5	0.0	92.0	2.81	Dol.col.sl/lms.pp vss	
10	3399.0-00.0	0.01	11.5	0.0	86.3	2.79	Bol,fxl,sl/lms	
3	400.0 - 3403.0						Not Recovered	
11	3403.0-04.0	0.15	16.0	0.0	82.4	2.82	Dol, suc	
12	3404.0-05.0	0.03	10.3	0.0	85.7	2.86	Dol:fxl-suc:sl/anhy	
13	3405.0-06.0	0.01	14.4	0.0	91.4	2.80	Dol,suc,sl/anhy	
14	3406.0-07.0	0.01	12.9	0.0	90.1	2,81	Dol:suc:sl/anhs	
15	3407.0-08.0	0.02	13.8	0.0	90.1	2.79	Dol;suc;sl/anhy	
16	3408.0-09.0	0.02	17.1	0.0	84.6	2.85	Dol; suc	

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Page 2

ARCO EXPLORATION COMPANY

Date: 13 Dec 1984

TTCS File #: 85107

Well:

Forest Creek Divide #1

PLUG DEAN-STARK ANALYSIS

Sample	Derth	Permeability Horz	Porosity	Satur Oıl	ation H2O	Grain Density	Lithology	
Number	(feet) 	(feet) (md) (%) (%) (%) (sm/cc)	(Um/cc)		(			
	3409.0 - 3417.0						Sh•slty	`
17	3417.0-18.0	0.30	12.2	0.0	71.0	2,68	Sd,f-ms,slty,pyr	
18	3418.0-19.0	0.07	12.0	0.0	86.2	2.65	Sd,f-mg,slty	
19	3419.0-20.0	0.15	12.9	0.0	80.4	2.65	Sd,f-cs,slts,sl/pyr	
20	3420.0-21.0	0.06	10.3	0.0	85.7	2.65	Sd,f-ms,slts	
21	3421.0-22.0	1.9	12.0	0.0	80.2	2.64	Sd,f-ms,sl/slty	
22	3422.0-23.0	4.0	12.0	0.0	81.6	2.64	Sd,f-ms,sl/slty	
23	3423.0-24.0	4.2	13.4	0.0	81.7	2.64	Sd,f-ms,sl/sltu	
24	3424.0-25.0	2.9	14.3	0.0	89.7	2.64	Sd,f-mg,sl/slty	
	3425.0 - 3428.0						Not Recovered	
25	3428.0-29.0	2.0	11.8	0.0	83.3	2.65	Sd,f-mg,sl/slty	
26	3129.0-30.0	2.5	10.0	0.0	81.2	2.64	Sd,f-ms,sl/slts	
27	3430.0-31.0	1.5	9.5	0.0	81.6	2.65	Sd,f-mg,sl/sltg	1
28	3431.0-32.0	1.6	10.0	0.0	87.3	2,65	Sd,f-mg,sl/sltu	(
29	3432.0-33.0	2.3	10.8	0.0	85.5	2.65	Sd:f-ms:s1/s1tv	
30	3433.0-34.0	1.9	11.5	0.0	78.3	2,65	Sd:f-ms:sl/sltu	
	3434.0 - 3439.5						Drilled Interval	
31	3439.5-40.0	5.9	10.9	0.0	59.4	2.65	Sd:f-ms:sl/slts	
32	3440.0-41.0	8.5	12.0	0.0	61.6	2.65	Sd,f-ms,sl/slty	
33	3141.0-42.0	9.8	12.3	0.0	60.0	2.65	Sd,f-ms,sl/slty	
34	3442.0-43.0	11	11.2	0.0	61.9	2.64	Sd,f-ms,sl/sltv	
35	3443.0-44.0	6.1	12.0	0.0	39.4	2,65	Sd:f-ms:sl/sltu	

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Page 3

ARCO EXPLORATION COMPANY

Date: 13 Dec 1984

TTCS File #: 85107

Well:

Forest Creck Divide #1

PLUG DEAN-STARK ANALYSIS

		Permeability	Porosity	Satur	ation	Grain	Lithology
Sample Number	Derth (feet)		H20 (%)	Densits (sm/cc)			
36	3444.0-45.0	9.6	11.7	0.0	82.8	2.65	Sd,f-mg,s1/slty
37	3445.0-46.0 3446.0 - 3461.0	6 + 4	10.4	0.0	88.5	2.65	Sd:f-ms:sl/slts Drilled Interval
38	3461.0-62.0	1.9	11.2	0.0	91.5	2.65	Sd,f-ms,sl/slts
39	3462.0-63.0	4.2	11.6	0.0	85.2	2.65	Sd+f-ms+s1/sltu
40	3463.0-64.0	13	11.0	0.0	78.2	2.65	Sd:f-ms:sl/slts
41	3464.0-65.0	9.5	11.1	0.0	89.4	2.64	Sd,f-ms,sl/slty

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### ARCO EXPLORATION COMPANY

Well:

Forest Creek Divide #1 State:

Field:

Wildcat

Brilling Fluid: Water Base

Utah

Counts:

Garfield Sec. 28-T315-R2W Location:

Date: 13 Dec 1984

TTCS File #: 85107

Elevation:

### PLUG DEAN-STARK ANALYSIS DATA SUMMARY

Zone Number	Derth Interval	Number Pe	ermeability Horz	Forosity	Satur: Oil	ation H2O	Grain Density	
	(feet)	samples		(%) ·	(%)	(%)	(4m/cc)	
OLAVAN	FORMATION							
1	3385.0-390.0	5	0.28 [0.33]	16.1 [4.3]	0.0 [0.0]	94.2 [4.6]	2.76 [0.0]	
2	3395.0-397.0	2	5.7 [6.4]	25.8 [0.6]	0.0	91.1 [7.2]	2.78 [0.0]	
3	3397.0-400.0	3	0.24 [0.23]	14.1 [2.3]	0.0 [0.0]	87.4 [4.1]	2.80 [0.0]	(
4	3403.0-409.0	6	0.04 E0.05]	14.1 [2.4]	0.0	87.4 [3.6]	2.82 [0.0]	
5	3417.0-421.0	4	0.14 [0.11]	11.9 [1.1]	0.0	80.8 [7.0]	2.66 [0.0]	
6	3421.0-425.0	4	3.3 [1.1]	12.9 [1.1]	0.0 [0.0]	83.3 [4.3]	2.64 [0.0]	

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Date: 13 Dec 1984

ARCO EXPLORATION COMPANY

Well:

Forest Creek Divide #1

DATA SUMMARY

Page 2

TTCS File #: 85107

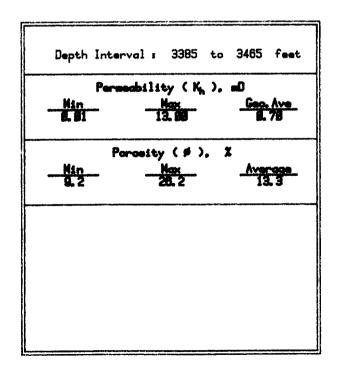
Zone	Derth	Number Pe	ermeability	Porosity	Satura	etion	Grain	
Number	Interval	of	Horz		Oil	H20	Densits	
	(feet)	samples	(md)	(%)	(%)	(%)	(sm/cc)	
7	3428.0-434.0	6	2.5	10.6	0.0	82.9	2.65	
			[1.3]	[0.9]	[0.0]	[3,2]	[0.0]	
8	3439.5-446.0	7	8.2	11.5	0.0	67.7	2.65	
			[2.1]	[0.7]	[0.0]	[12.4]	[0.0]	
9	3461.0-465.0	4	7.2	11.2	0.0	86.1	2.65	
			[5.0]	[0.33	[0.0]	[5.9]	[0.0]	

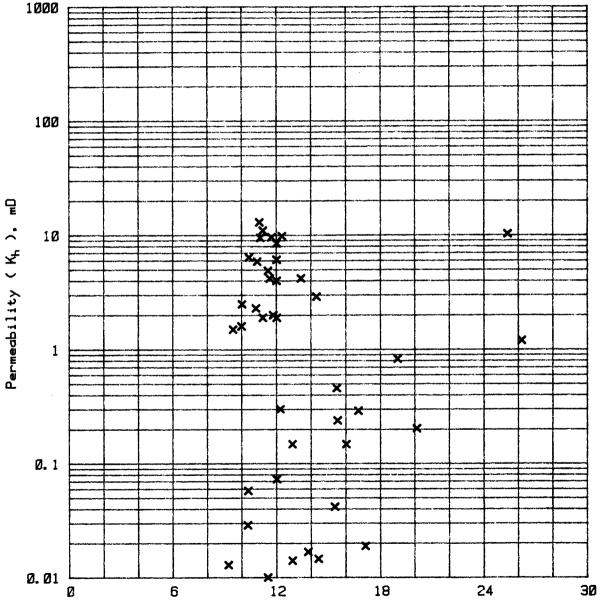
University Research Park - 360 Wakara Way - Salt Lake City, Utah 84108 - (801) 584-2480 - TWX 910-925-5284

# HORIZONTAL PERMEABILITY VS POROSITY

### ARCO EXPLORATION COMPANY

Forest Creek Divide #1
Wildcat Field
Garfield County, Utah
13 Dec 1984





Porosity ( \$ ). %

### ARCO Exploration Company Forest Creek Divide Well No.1 Garfield County, Utah

### TTCS File No. 85107

### 1 COPY TO:

Hewitt Producing Company 401 9th Avenue, S.W., Suite 915 Calgary, Alberta T2P3C5

#### 1 COPY TO:

Donald H. Harcourt 800 Garden Street, Suite K Santa Barbara, CA 93101

### 2 COPIES TO:

Pennzoil Company 16th & Broadway, Suite 1800 Denver, CO 80202

Attn: J. L. Barr

### 1 COPY TO:

Pennzoil Company 16th & Broadway, Suite 1800 Denver, CO 80202

Attn: Davis Hardy

### 2 COPIES TO:

Marthon Oil Company Exploration Supervisor P.O. Box 2659 Casper, WY 82602

Attn: S.W. Area

### 2 COPIES TO:

Superior Oil 600 17th Street, Suite 1500 Denver, CO 80202

Attn: Dean DuBois

#### 4 COPIES TO:

Arco Exploration Company P.O. Box 5540 Denver, CO 80217

Attn: Jim Perkins

Form 3160-5 (November 1983) (Formerly 9-331) DEPA	TIGHT HOLE U JED STATES RTMENT OF THE INTER	SUBMIT IN TR CATES (Other lastruction) (OTHER STATES AND THE CATES	Form approved. Budget Bureau No Expires August 31 5. LEARS DESIGNATION AN U-52169	D SERIAL FO.
CLINDRY	NOTICES AND REPORTS PROPOSALS to drill or to despen or plus PLICATION FOR PERMIT—" for such	OPOWELLS	NA	S TRIBS HAME
OIL X CAB OFF			7. UNIT AGREMENT NAME Forest Creek D	
	mpany, Div. of Atlantic	Richfield Company	NA	
See also space 17 below.)	er, Colorado 80217 tion clearly and in accordance with an	y State requirements.*	Divide Unit #1 10. FIBLD AND FOOL, OR V	
At surface  130' FNL & 243	5' FWL NE/4 NW/4		11. SEC., T., B., M., OS SEA SURVEY OS ASSA 28-315-2W	. AMD
14. PERMIT NO.	15. BLEVATIONS (Show whether 17085		12. COCHTY OR PARISE Garfield	Utah
43-017-30127 16. <b>Chec</b>	k Appropriate Box To Indicate		Other Data	
NOTICE OF	INTENTION TO:		BHT LEPOST OF:	LL _
PRACTURE TREAT SHOOT OR ACIDISE REPAIR WELL	MULTIPLE COMPLETE ASANDON® CHANGE PLANS	PRACTURE TREATMENT SECOTING OR ACIDIBING (Other) (Norm: Report results	ALTERING CAS ASANDONMENT of multiple completion of	•
Suzanne Barnes (ARCO well's access road h surface landowner).	e conversations between), the responsibility o as been transferred fro Attached, please find er Creek Reservoir Co.	f the culvert removal was a marked to Otter Creek I	within the subje Reservoir Co. (t	ct
		A	ECEIVED	rica)
			APR 03 1985	
		1	DIVISION OF OIL GAS & MINING	
18. I hereby certify that the fore	//	erations Manager	nam 3/2	./65-
SIGNED L.B. MOTSE  (This space for Federal or St	// KUF	eractons handser		
APPROVED BY CONDITIONS OF APPROVA	TITLE		DATE	

\*See Instructions on Revene Side



355 W. North Temple • 3 Triad Center • Suite 350 • Salt Lake City, UT 84180-1203 • 801-538-5340

January 31, 1986

TO:

Jean Doutre, Oil and Gas Field Specialist

FROM:

Dorothy Swindel, Oil and Gas Field Specialist 05

RE:

Garfield County Inspections

The attached information concerns inspections which I conducted in Garfield County. The list includes 16 plugged and abandoned wells which require no further inspections. The file folder contains some of the more recently plugged wells in the county, but certainly does not contain all the plugged wells in Garfield County. This material was compiled to assist you in your inspections of that area, and prevent any repetitious inspections. All producing and/or shut-in wells will need their yearly inspection this summer.

### ATTACHMENT 1 (continued)

RYDER SCOTT OIL COMPANY Marsh 1-32 Sec.32, T.35S, R.4E,

ARCO OIL AND GAS COMPANY Buck Knoll Unit #1 Sec.36, T.37S, R.4 1/2 W,

ARCO OIL AND GAS COMPANY Forest Creek Divide Unit #1 Sec.28, T.31S, R.2W, P+A.